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NOTES ON HARVESTING PADI AND ITS CONVERSION INTO RICE.

By H. W. Jack.

THE following notes were prepared at the request of the Director of Food Production and have been distributed as a circular to the managers of various estates, they are reproduced here for general information.

HARVESTING.

(*a*) Cutting Single Ears.—Harvesting padi by cutting each ear separately is a method used by both Malays and Tamils, though the knives they use and the rates at which they cut differ widely. The Malays use a knife peculiar to their race which they call a "pisau menuai" and which has been discribed in the latest number of the *Federated Malay States Agricultural Bulletin.* The rate at which Malay women can cut a crop with this knife depends on the condition of the padi and the industry of the worker. The density of a crop appears to make no material difference to the rate of harvesting.

Dealing with padi in good condition, a good coolie can cut 80-90 gantangs of unthreshed padi, which equals roughly 40 gantangs of clean padi (threshed and winnowed) per day of seven hours. Tamils generally use a simple knife (e.g., beaten out tapping knife) when they harvest crops ear by ear and work less rapidly on the average than a good Malay. Tamil women can cut three sacks of ears—that is, approximately, 35 gantangs of clean padi in a day of eight hours.

To thresh the padi harvested by the above methods the padi in the ear, when thoroughly dry, is thrown on to grass mats or guni sacks and the coolies walk on it, turning the padi over repeatedly in a rolling motion until the grain becomes detached from the ears. After threshing, the padi is winnowed by being tossed repeatedly in a tray-shaped basket, or by dropping it through the meshes of a suspended basket exposed to a breeze, or it is put through a Malay winnowing machine, such as is now in use on many rubber estates for dealing with "ragi," and which now costs $38 in North Perak.

Tamils often thresh their padi by beating it with sticks in place of using their feet. A good Malay can thresh and winnow 80-100 gantangs of clean padi per day, though sore feet would prevent him from doing it on several successive days. The use of sticks in threshing by Tamils, though somewhat slower than the use of the feet, can be continued for a longer spell and consequently an equal amount of clean padi per day can be prepared by either method.

Harvesting padi by cutting individual ears is a slow method of dealing with a crop and yet a useful one where crops mature unevenly from different causes, in that the loss of grain due to over or under ripeness is reduced to a minimum.

(*b*) Harvesting in Mass.—Padi can only be cut in mass when the seed from which it is produced is fairly pure and when the soil and moisture conditions are moderately uniform so that the crop matures evenly, otherwise, the use of the sickle or of machinery would be accompanied with heavy loss of grain. For this reason areas set apart for the production of padi (and "ragi") should be selected for their uniformity with regard to soil and water conditions, and if possible, uniform seed of one variety only should be used. Unfortunately, most of the crops now mature have been grown from mixed seed, a regrettable but unavoidable fact, owing to the sudden demand for seed to meet the food crisis. No doubt planters will select seed for their own estates from the crops now mature and in their selection they should give special attention to the matter of even ripening of the padi. In time, the Agricultural Department hopes to have a small quantity of pure bred seed of hill padi for multiplication and distribution.

Cutting padi in mass is usually done by Tamils who use a sickle called by Malays a "sabit." The "sabit" is a curved blade some 14 inches long and $\frac{3}{4}$ inch in width, which has its concave edge ground to a saw-edge and is inserted in a wooden handle.

The padi is cut in handfuls, some 8-12 inches above the soil surface, the cut padi then being placed on top of the stubble to dry for two days. When dry the padi is gathered, bound loosely into armfuls and conveyed to the threshing "tong," which is simply a large four-foot tub or box having a short ladder placed inside it at an inclination to the side. The rounds of the ladder are usually spaced about four inches apart.

Around the "tong" a fence of grass matting is placed to catch flying grains and direct them into the "tong." The bundles of padi are beaten two or three times against the rounds of the ladder and 95 per cent. of the grain readily becomes detached from the straw and drops into the "tong." As the "tong" fills up, the padi is removed and winnowed by any of the above-mentioned methods, before being measured into bags for the miller. A good Tamil coolie can cut a heavy crop from $1\frac{1}{4}$ acres in a day of eight hours, using the "sabit" or he can work at such a rate as to cut and thresh the padi from $\frac{3}{4}$ acre per day. Tamils usually do this work, including winnowing and bagging, in gangs of five or more and are almost always paid in clean padi their contracts varying from 15-25 per cent. of the crop they harvest, according to the density of the crop and its condition at harvesting. The "tong" method of threshing is always used in the field.

Occasionally coolies, in place of using a "tong," beat the padi bundles on the ground, but the use of the "tong" is obviously more advantageous. The use of the "sabit" is the quickest known method of cutting padi in this country, but as mentioned above, its success depends on the even maturity of the crop.

As rice lands are divided into small compartments and as the soil is frequently in a miry condition at the time of harvest, the introduction of reaping machines is of doubtful utility, though they may be useful on the hard lands of estates for cutting hill padi and "ragi." In years when dry weather favours the harvest, reaping machines may prove very useful for wet padi grown on flat coastal lands in this country where the fields are divided into much larger areas than in the more undulating inland districts.

CONVERSION OF PADI INTO RICE.

The native methods of preparing rice from padi suit their economic conditions, for at harvest scarcity of labour, which is keenly felt in all large padi growing districts, renders it impossible to convert all the harvested padi into rice, consequently, the padi is stored as such and is milled at leisure according to immediate requirements. Moreover, stored padi is less subject to pest than stored rice, and stored rice does not retain its flavour whereas stored padi does. The Malays use two types of mechanical contrivance in milling their padi. The first and most common is the well-known "lesong" by which the padi is pounded continuously, whereas the second type is based on the principal of the rotating mill stone.

The "lesong" is so common that it scarcely merits description. There are three forms of "lesong." The simplest being the "lesong tangan" used by both Malays and Tamils. This consists of a block of wood, usually the bole of a tree, which is hollowed on one side to form a basin capable of containing from 2-4 gantangs of padi and the opposite side is flattened to render the whole steady. Padi is placed in the basin and the coolie pounds the padi with a heavy cylindrical piece of timber until the husk separates from the grain. A Malay woman using this type of "lesong" can pound up three gantangs of padi in an hour, while a Tamil woman would do the same amount in a shorter time. Sometimes, in place of a small basin, a large one of some 12 gantangs capacity is used and two or three coolies pound the padi instead of only one. Three coolies working in harmony in this way can hull and winnow a bag of padi (25 gantangs) in an hour. The second form of "lesong" is common in all Malay kampongs and is known as the "lesong kaki" since it is worked by the feet. In principle it is a huge hammer of which the handle is a stout four-inch beam some 6-7 feet long. The handle is pivotted some two feet from its end between fixed uprights, while the head or striking part of this hammer is arranged to drop into a basin formed by hollowing out a log, usually chengai. The striking part consists of a short heavy piece of rounded hardwood about one foot long, which is inserted near the end of the beam, and is usually iron-bound and frequently studded with nails at its extremity to reduce the rate of wear. The coolie stands behind the pivot and by exerting a pressure with his or her foot on the short end of the beam, raises the long or hammer end, then, by suddenly releasing the pressure, the weight of the hammer end causes it to drop with

considerable force and thus to pound the padi. The weight of the hammer beam necessitates a pressure on the short end of some 15-20 lbs. each time the hammer is raised, so that this work is by no means light. A good coolie, using the "lesong kaki" can hull about seven gantangs in an hour. Usually, the padi is hulled, then winnowed, a second time. The percentage of broken rice depends largely on the condition and age of the padi. A "lesong kaki" costs $17 on the average though this price varies considerably in different districts.

The third form of lesong is the "lesong ayer" which is identical with the lesong kaki except that water power replaces coolie labour. Water is led over a simple wooden turbine wheel, which is connected to a stout shaft. The shaft has a short strong wooden projection which when the water pressure causes the wheel and shaft to revolve exerts pressure on the short end of the "lesong" thus raising the hammer. The rate at which the "lesong ayer" can hull padi depends on the water power, the greater the water pressure the more rapid will be the hammering, but there is a limit to the rate of hammering as it is necessary for a coolie to stir up the padi in the basin after each stroke of the hammer, otherwise the rice would be much broken. Sometimes the pounding is done by a heavy beam arranged to slide up and down vertically between fixed slots and in this arrangement the water power is, of course, used to raise the beam or hammer directly, in place of using a pivot and downward pressure. Each lot of padi is subjected to hulling twice as in the use of the other forms of "lesong." Generally, a "lesong ayer" is arranged so that the water power works six or eight hammers at a time. The cost of a "lesong ayer" largely depends on a ready supply of water pressure, the wheel, shaft and one "lesong" should cost about $70 while six "lesongs" together with water wheel and shaft have been erected for $160. A "lesong ayer" with six hammers is capable of hulling 40-45 gantangs of padi per hour.

The Malay hand-grinding mill is rather complicated to describe but one may be seen in the Agricultural Department's office by those who are interested. The mill consists of two circular grinding surfaces, of which the lower one is fixed while the upper one which has a central aperture is free to revolve on a pivot and can be adjusted to regulate the space separating it from the lower one. Each grinding surface is about 22 inches in diameter and is composed of chips of "bakau" wood from $1\frac{1}{2}$-3 inches wide and $\frac{1}{8}$-$\frac{1}{4}$ inches in thickness sunk, to a depth of 4-5 inches, into unbaked but hardened pottery clay bound around by bamboo basket work to give added strength. The "bakau" chips are spaced about $\frac{1}{4}$ inch apart and arranged in rows running from the centre to the circumference of both grinding surfaces, the chips in each row being set at an angle of about 30 degrees to the radii of the surfaces. Underneath the lower grinding stone, thoroughly dried coconut fibre is packed tightly into the basket work, which is securely held in a wooden frame pegged to the ground. The effect of the fibre packing is to render a small amount of springiness to the whole mill, which prevents the hardened clay masses from cracking under the vibration of rotation. The basket work binding the upper mill stone is continued upwards to form the receptacle for the padi which is to be milled and is usually of some seven-gantang capacity. The padi enters the mill through a central

aperture in the upper grind stone and through the same aperture the pivot from the lower grind stone projects. This pivot keeps the upper grind stone in position. On the pivot rests a wooden beam, which is fixed to the top of the clay mass of the upper grind stone and protrudes through the basket work about one foot on each side. Through this beam there is a central aperture to admit the padi from the receptacle to the mill, and across this aperture there is a simple arrangement for raising or lowering the beam and thus regulating the distance between the grinding surfaces. The upper grind stone is made to revolve at any desired rate by a simple and effective, though ancient, mechanical device. This consists of a strong wooden rod some 4-5 feet long, bearing at one end a stout iron peg which fits loosely into a socket in the protruding end of the beam just mentioned. The other end of the rod is fastened rigidly to the centre of a wooden hand piece which is suspended from a height of about six feet above the level of the upper grind stone. The coolie grasps the hand piece with both hands and by lunging forwards slightly can rotate the upper grind stone with the expenditure of very little energy. The rice and chaff after passing between the grinding surfaces is retained in a trough formed around the mill by the continuation of the basket work encircling the lower grind stone. This type of huller when worked by a good coolie can hull, including winnowing, 20 gantangs of padi per hour. The padi is put through the mill once, then winnowed, then any escaped padi is separated from the rice by rotating the mixture smartly in a circular basket, when the padi comes to the top and is easily removed and again put through the mill. These hullers can be made in Krian for $30 and can grind 3,500-4,000 gantangs of padi without renewing the grinding surfaces.

Machine Hullers, etc.—A few types of hand machines have been tried for hulling padi but, so far none of them appear to equal the Malay grinding mill in efficiency. The hand hullers tested invariably gave a much larger percentage of broken grain than is usually obtained in using a Malay grinding mill.

The types that have been tried may be seen at the offices of the Department of Agriculture.

FOOD PRESERVATION IN THE FEDERATED MALAY STATES.

AN EXPERIMENT IN COLD STORAGE OF THE DURIAN—(*cont.*).

By C. E. Cumming and E. A. Hodges.

Observations subsequent to January 7th, 1920.

OF the twenty durians placed in an iron tank, sunk in brine, and kept below freezing point since December, 1919, five were removed and reported upon during January, 1920. During the first quarter of 1920 seven fruits were removed and eaten cold, the consumers stating that the fruit was good though not up to the standard of that fresh from the tree.

On the 1st April, 1920, 8.30 p.m.—The remaining eight fruits were removed from the tank, four were replaced and four taken for observation.

9.30 p.m., 1st April, 1920.—The four fruits were found to be free from segmentation although the calyx had still further darkened in colour. Three were opened, of which the largest contained some pulp of natural appearance, frozen hard, and of flavour which may be described as good though not up to that of a good fruit fresh from the tree. The calyces of all four fruits thawed rapidly and became sodden in one hour, the interiors resembling the partly baked pastry sometimes found in a pie, although the pulp in all cases appeared fresh and natural. All four fruits were found to have suffered by impregnation of brine which seems to have found its way through the iron tank.

With the exception of the largest fruit referred to already as containing some sweet pulp, having partly escaped possibly on account of its size, all contents, although edible, were unpalatable (except perhaps to a very hungry consumer) on account of saltness.

8 a.m., 24th April, 1920.—The last of the four fruits was opened and found to be thawed through, the pulp was very much salted. Its general appearance corresponded with the other fruit.

The rapid thawing of all the fruit was caused by salt impregnation which may also be responsible for their immunity from segmentation. An experiment during the next durian season may determine the effect of immersing the fruit in brine before refrigeration, with a view to arresting segmentation.

THE AFRICAN OIL PALM.

WE take this opportunity of drawing the attention of our readers to the interesting report of the Mission to West Africa to study the question of the exploitation of the oil palm, by G. Van Pelt, D. Sc., appearing in No. 6, 1919, of the *Bulletin des Matieres Grasses, de l' institut Colonial de Marseille.* A further article, by M. Houard, Directeur de l'Agriculture du Dahomey, also of extreme interest, appears in No. 5, 1919, of the same publication.

The following is a brief translation of some of the more important parts of Dr. G. Van Pelt's Report, a further portion, dealing with the establishment of Oil Palm Plantations, will appear in the next issue of the *Agricultural Bulletin.*

F. de la M. N.

THE OIL PALM.

REPORT OF THE MISSION TO WEST AFRICA.

By G. Van Pelt, D. Sc.

(Chief of Coutchouc Department of the Colonial Institute of Marseilles.)

THE opportunity was taken during an expedition to French Africa of considering the possibility of applying plantation methods to the oil palm.

Investigators of the problem in Africa have all drawn attention to the great difference between the yields actually obtained and those obtainable by improved methods. This article deals with such methods and formulates a programme for those who may be interested in the future development of the industry.

The subject will be considered under the following headings:

1. Factories working on material collected by natives from *palmeries* * already in existence and not improved.
2. Factories supplied by *palmeries* improved by clearing, etc.
3. The creation of plantations.

The following observations apply particularly to the Ivory Coast, but could be extended to other parts of French West Africa.

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* A "Palmerie" is a jungle area where wild palms are met with in considerable numbers.

The exploitation of the oil palm is best understood by the natives of Dahomey, but even here the advance made should be taken as an earnest only of what might be done.

Practically all the oil exported from French Africa is now the product of so-called "spontaneous" *palmeries*. Commercial houses purchase the oil from native collectors, who obtain the fruits in the *palmeries*, situated within a radius of a few kilometers from the villages. When travelling from village to village on the Ivory Coast, one is very much impressed by the large number of palms unexploited and unexploitable, growing in the bush. Only in the immediate neighbourhood of the villages has any improvement been effected. And as one travels, beyond this limit, only rough tracks are encountered, and any sign of improvement soon disappears completely, the palms being covered with epiphytes, stifled by vegetation, choked by dead leaves and unproductive until they can force their way to light and air. In the regions where *palmeries* are numerous and dense, such as the Cerile des Lagunes of the Ivory Coast, it is estimated that less than 10 per cent. of the existing plants are utilized; taking into consideration the present low yield due to lack of care and attention, the increased production, which should follow the application of sounder methods, can be imagined.

(i)—Increase of Production by Application of Factory Methods Alone.

The most striking feature of the present extraction of oil by primitive methods is the large waste entailed, 8-10 per cent. of oil only being obtained by the natives as against 16-20 per cent. by machinery. Installation of oil factories is then a first essential.

Small factories have been given a trial in various parts of the Ivory Coast. The most serious difficulty encountered has been that of obtaining a regular supply of fresh fruits, as it is absolutely essential for economical running that the machinery should not be idle for lack of material, at least during the time of collection.

Strange as this may seem in a region literally covered with palms, periods of idleness have frequently occurred; the explanation is simple as the following examples will show. Imagine a factory with a capacity of 10 tons (Metric)* of fruit per day—the smallest economically possible. Observations in French West Africa suggest an estimated average of 50 immediately exploitable palms per hectare, each capable of giving five bunches of fruit of 10 kilos per year. If, however, the collection is from unimproved areas this average is too high, owing to low yield and difficulty of collection. A more correct estimate will therefore be 25 palms per hectare yielding 50 kilos of bunches and about 25 kilos of fruit per year—i.e., a total of 625 kilos of fruit per hectare per annum. Assuming that the factory runs during the eight months of busiest collection, a total of 2,400,000 kilos is necessary to give a daily total of 10 tons of fruit.

*1 Ton Metric = 0.98 tons English; 1 metre = 1.09 yds; 1 kilometre = 0.62 miles; 1 hectare = 2.47 acres; 1 kilogram = 2.20 lbs.

At 625 kilos per hectare this necessitates an area of 4,000 hectares or more than a six kilometre side square. Moreover, owing to difficulty of collection the native climbers will be unable to collect more than about a hundred kilos of fruit, each, per day. About 100 climbers must therefore be assured every day. Lastly, given the land and workers, the will to work is essential.

The next consideration is the transport of fruit from tree to factory. Undergrowth and uneven distribution of palms alike enforce hand transport on the majority of *palmeries* actually exploited : only near the Lagune is water transport possible.

It might seem reasonable to expect that those who finance the factory would undertake the improvement of *palmeries* and means of transport. Local conditions however do not encourage capitalists to shoulder this burden without any guarantee of a regular and permanent supply for their factories. Chief among the reasons for irregularity are laziness of the native and his hatred of regular work, and with no control over land, palms, collection, or collector, and no means or right of action, hesitation is natural. Further, the figures above are based on the receipt of the entire production of the area, without sale of fruit or oil by the natives to outsiders.

It may appear illogical to choose the worst possible conditions for a hypothetical factory—i.e., purchase of fruit from an absolutely "wild" area, but reasons for this course are given below.

(ii)—Factories Supplied by Cultivated Palmeries.

It has been abundantly proved that *Elaeis* is one of the most amenable of crops to cultural attention ; clearing of undergrowth resulting in considerable and rapid reduction of the producing age. While it is difficult to give exact figures, results obtained at the experimental station at Bingerville indicate that thorough clearing should result in double the production after a year, rising to four times the initial output after 3-4 years.

From the practical point of view forecasts of yield are less useful than a knowledge of the extent to which realization is likely under working conditions.

The work of "improving" a natural *palmerie* requires funds, and one essential condition of the European capitalist would be, *security of tenure of concession or at least extended rights of collection.* Actually, the property rights of the natives constitute a formidable barrier to such concessions. Without disputing such native rights, it is possible to assert that about 90 per cent. of the palms of the Ivory Coast are unexploited and unexploitable by the owners, the ownership itself being difficult to ascertain. It is further said that the natives oppose exploitation not because of any feared injury to themselves, but from dislike of novelties which might change their habits or methods of work.

Acquaintance with the natives makes it certain that should concessions be granted in spite of their protests, the concessionaires would soon find themselves in difficulties, especially in the recruiting of labour.

It may then be assumed that every application for concessions in palm bearing areas, would be contested, and even if nothing worse happened time would be lost, and time as will be shown later, is one of the most important factors of the situation.

Another method of exploiting "improved" *palmeries* would be to give monopolies of purchase or receipt of fruits, without alienating ownership. This would necessitate an agreement between the manufacturing and purchasing houses in the district, or better the commercial houses might subscribe capital for the factories; otherwise antagonism would arise. Given favourable concessions, or monopolies, the problem of labour remains, and the scarcity of this in Africa creates a real difficulty the solution of which leads us to our third method.

(*To be continued.*)

DIRECTIONS FOR MAILING SPECIMENS OF INSECTS.

By G. H. Corbett.

THIS note is written with the intention of giving to planters and others a few directions which should be observed so as to facilitate the work in connection with an enquiry when sending specimens of insects to the Agricultural Department.

Advice is asked and when possible given but in the majority of cases insects on arrival are unrecognizable, and the description of the injury or supposed damage to the plants so doubtful that in a large number of instances no suggestion for control can be advanced. This necessitates writing for more specimens or for a fuller description of the alleged damage caused by the insect.

1. Instinctively a match box is considered the best receptacle in which to forward an insect for determination. The reason for this is presumably that little trouble is needed to find one. Reflection neither for the insect's safety nor for the assistance of the adviser seems to be given.

Match boxes should never be used for sending insects through the post since they are often broken in transit. This results in the destruction of the insect, if not in its disappearance. Cardboard boxes are useless for the same reason. Strong wooden boxes are better than tin boxes, such as cigarette or biscuit tins, especially for long distances. If, however, the specimen is a wood borer, well ventilated tin boxes should be used.

2. As many specimens of the insect as possible should be forwarded, though overcrowding should be avoided by employing more packages.

In a country of this nature where insect life has been disturbed by the comparatively sudden conversion of jungle into cultivated areas, it is frequently necessary to study the insect's peculiarities before any reliable preventive or control measures can be recommended. To investigate the life history of an insect a large number of the particular species of insect is often required.

3. It is frequently fatal to place two different species of insects in the same box, and it is inadvisable to do so as one of the insects might live at the expense of the other. If information is required about two or more species of insects, each species should be placed in a different case.

4. All insects and larvæ (grubs, maggots, caterpillars, etc.) should be sent alive with a supply of food, and despatched by passenger train as soon as possible after collecting.

5. All packages should be distinctly marked Live Insects and should bear the name and address of the sender.

6. It is of the utmost importance that a letter should accompany the package giving a full account of the nature and extent of the damage done, the part or parts, and the name or names of the plants attacked, and the date when first noticed.

7. When in doubt as to the best manner of forwarding or packing insects, assistance can always be obtained by communicating with the Director of Agriculture, F.M.S. and S.S.

RAGI FLOUR MILL.

A KAISAR-I-HIND Flour Mill was obtained from Nahan Foundry, Nahan, Punjab, India, and has been installed at the Agricultural Offices, Kuala Lumpur. The cost of the mill is Rs. 195, the freight from Ambala to Calcutta amounted to Rs. 49, and the shipping freight and other forwarding charges to Rs. 173, a total of Rs. 417. This mill has stones two feet in diameter and requires a six B.H.P. oil engine to drive it. The capacity of this mill, when dealing with ragi, has recently been worked out with the following results: Fifty-six pounds of ragi seed were treated in 35 minutes. This material after passing through the mill was sieved by one Tamil coolie in 40 minutes by means of an ordinary latex sieve and yielded 40 lbs. flour and 15 lbs. residue. The residue was put through the mill in ten minutes and then sieved, yielding 10 lbs. flour and 4 lbs. residue.

It will be seen from the above that 50 lbs. of flour are obtained from 56 lbs. of ragi seed. It should be mentioned here that the ragi in question was very old and of poor quality, which necessitated the residue being put through the mill. With good quality grain this would be unnecessary. Before harvesting ragi, care should be taken to see that the heads are mature before picking. After collection, the heads are sun-dried for about one week, and the seeds then separated by means of hand beating with sticks. The grain is then roughly sieved to remove the husk. If this is well done then it will be unnecessary to sieve the flour.

Ragi seed keeps in good condition for a year or more, provided it is well stored but the flour only keeps for about a fortnight and should therefore be manufactured according to requirements.

F. G. Spring.

NOTES ON AGRICULTURAL SHOWS.

By Rajah Mahmud.

THE object of Government in holding agricultural shows in various districts is to encourage the natives and others to cultivate more food crops.

Since the beginning of 1918 many such shows have been held in various parts of the country in which the writer had the privilege of being present as a judge or assisting in the judging of cereals, and thus gained experience in gauging the failures of the Malays. Their chief failing is that they do not know exactly what is wanted of them or that they neglect to adhere to the specified requirements of the Show Committee.

The show is divided into various classes such as vegetables, fruits, cereals, and so on. This division is necessary for the arrangement of the exhibits to show them to the best advantage and to facilitate judging.

The following are a few hints to exhibitors of some of the principal crops appearing in show programmes.

(1)—Padi.

A good sample is required, and if a collection is asked for the exhibitor must bring as many varieties as he can get. (Collections of varieties should not be encouraged as this leads to mixture of varieties under cultivation in the fields and usually collections do not represent an individual grower's efforts.) Every sample must be cleaned, well dried and not mixed. If half a chupak is wanted for a sample, the exhibitor must produce at least that amount. All the samples should be placed in clean "sumpits" (=Pandan baskets) or any other neat receptacle.

"Wet" padi must not be mixed with "dry" padi. Each sample ought to be accompanied by a few ears of the variety. It is also advisable to affix the name, maturation period and locality of each sample for the information of the public.

(2)—Rice.

The same remarks (as applied to padi) apply to rice.

Do not exhibit "kedai" rice.

A good sample is that which is produced by pounding in a "lesong," and should have a white appearance and whole grains. It should also be cleaned and not mixed.

The sample should be labelled with its variety and locality. It is also advisable to produce the padi from which the rice was obtained.

(3)—Maize.

Usually six cobs are required, and therefore six cobs must be produced and exhibited otherwise the exhibit will be disqualified, however good its condition may be. The exhibit must bear a label showing locality, maturation period and local name of variety.

A good cob:

(*a*) uniform in colour, dryness and maturity;

(*b*) grains well filled, wedge shaped and evenly sized;

(*c*) rows tightly packed together;

(*d*) large;

(*e*) butts well rounded off and tips covered with grains;

(*f*) free from "ulat," weevil, etc.;

(*g*) husked before staging.

A bad cob:

(*a*) not pure, having mixed grains on the same cob;

(*b*) not well filled;

(*c*) attacked by ulats, etc;

(*d*) unripe.

If a collection of maize is wanted, exhibit as many varieties as can possibly be obtained, but do not include Sorghum in the collection. (Sorghum is frequently called by Malays "Jagong Gerbang" = spreading maize).

(4)—Coconuts.

A good nut which is likely to obtain a prize is one having a round shape and large size with thin husk but large kernel. Long slender or oval shaped nuts are undesirable. An exhibitor should show two nuts from the same tree, one nut to be split in half to show the thickness of husk, kernel and meat. The label should show locality, age of tree, name of variety and number of nuts per annum from the tree if possible.

(5)—Fruits and Vegetables.

The requirements of the circular should be adhered to. Many exhibitors fail to do this and consequently many of their exhibits are disqualified.

In bringing fruits for the show, selected ones only should be brought. They must be clean, sound and properly ripe and labelled to show locality.

Never buy articles for show at "kedais."

(6)—Poultry, etc.

Only strong, well developed poultry should be brought to the show. Freaks should not to shown unless asked for.

In bringing eggs for the show, see that the number required is complied with and also that the eggs are clean and uniform in size and colour.

(7)—General.

An agricultural show is not a place for amusement but is instituted for the attainment of definite ends:

(*a*) Encouragement of the cultivation of food crops.

(*b*) Development of habits of thrift and cleanliness by the Malays and others.

(*c*) The education of would-be cultivators.

(*d*) The advertising of the food producing capabilities of the country.

Many of the Malays fail to pay attention to the requirements of the show programme. Only things which are wanted should be exhibited and not ones having a peculiar appearance or something of that sort.

For example, a collection of jungle edible fruits is required. The exhibitor should only collect and exhibit *jungle* fruits which are *edible*. In some cases, the Malays included poisonous fruits in the collection thinking that by increasing the numbers of their collection, they would win a prize.

Similarly, in the collection of *kampong* fruits, they include jungle fruits.

All these minor details should be heeded in future by those anxious to win prizes.

PRECIS MINUTES OF A MEETING OF THE ADVISORY COMMITTEE, DEPARTMENT OF AGRICULTURE,

HELD AT THE OFFICE OF THE DIRECTOR OF AGRICULTURE AT 10.30 A.M. ON THURSDAY, JANUARY 29TH, 1920.

PRESENT:—Mr. L. Lewton-Brain (Director of Agriculture), Chairman, Messrs. F. G. Harvey, V. R. Shelton-Agar, J. S. Ferguson, J. Bruce, C. Bell and Towkay Chew Kam Chuan.

Mr. F. de la Mare Norris (Assistant to Director), Secretary.

ABSENT:—Messrs. W. S. Cookson, J. W. Kennedy, R. H. Phillips, H. C. D'Arcy Irvine and Towkay Lee Kong Lam.

Messrs. B. J. Eaton, A. Sharples and W. N. C. Belgrave attend the meeting.

Before commencing the business of the meeting the Chairman moves a resolution expressing deep regret at the death of Mr. J. D. McCulloch, a member of the Committee, who had always taken the keenest interest in its meetings and in the agricultural welfare of Malaya.

The resolution is carried in silence, standing.

1. The minutes of the previous meeting held on Wednesday, 22nd October, having been circulated, are taken as read and confirmed.

DISCUSSION OF QUARTERLY PROGRESS REPORTS.

2. The question of forming a separate section of the Agricultural Department for dealing entirely with the padi cultivation question is discussed at some length. Mr. Shelton-Agar is of the opinion that enough has not been done, scientific work has no doubt been going on, but new areas had not been opened up. It is pointed out that such scientific work must be the basis of development. The opening up of new areas is mainly a question of irrigation. Such work could not be carried out without the experts for the work. The advisability of the Government opening up a large scale "padi" farm, similar to the stock farm, is given consideration. The Chairman says he has discussed the whole matter very thoroughly with the Food Controller, but that they had decided that nothing was practical for Government work on estate scale, except possibly hill padi. It is decided to bring up the matter at the next meeting for further discussion.

The Director asks all members to read Mr. Hose's report, also his article in the *Bulletin*—he thinks they should make sure that Government took definite notice of Mr. Hose's recommendations. The meeting decides that a letter be sent to Government supporting Mr. Hose's recommendations.

Selangor Large Scale Farm.

3. The Chairman states that recommendations of staff had been made.

Sapintas Estate.

4. Mr. Eaton states that some of the details of Sapintas work have been laid down and will start immediately.

Bacteriology and Soil Investigations.

5. The Director of Agriculture discusses the steps that have been taken in India where a Bacteriologist has been recommended for every province by the Board of Agriculture. He asks for the support of the Committee to undertake work in this country. Mr. Eaton thinks it very important that such a man should be appointed.

The Committee supports a resolution "That a Bacteriologist be appointed to take up this work, attached to the chemical division."

Stock Farm.

6. Mr. Shelton-Agar asks if the Sub-Committee had drawn up their estimates.

The Director of Agriculture replies that they had been unable to do so as they had not been able to get local information about machinery.

General.

7. The Chairman points out that this is the last meeting of the 1919 Committee and invites members to forward suggestion for the 1920 Committee.

The meeting terminates at 12.10 p.m.

TROPICAL AGRICULTURAL COLLEGE.

THE following report taken from the *Barbados Advocate* of March 16th gives an account of an address delivered by Sir Francis Watts, K.C.M.G., Imperial Commissioner of Agriculture for the West Indies to the Associated West Indian Chambers of Commerce, on the subject of the Tropical Agricultural College it is proposed to found in one of the West Indian Colonies.

"Mr. President and members of the West Indian Associated Chambers of Commerce: For a great many years the opinion has been freely expressed that an Agricultural College is needed in the West Indies in order that orderly and definitely formulated instruction might be given in matters pertaining to West Indian Tropical Agriculture, which is the basis of practically all the commerce and enterprise of these Colonies. Following upon these early West Indian expression of ideas there has been a widespread desire for Agricultural Colleges in other British tropical possessions, and some eight or ten years ago this question was freely discussed and opinions recorded that it was desirable that there should be such Colleges both in the Eastern and the Western Tropics. The matter remained in abeyance until a little more than a year ago, when a movement in favour of establishing a College in the West Indies took active shape and resolutions were passed in a number of these West Indian Colonies directing the attention of the Secretary of State for the Colonies to the question, and asking that he would take steps to make possible the establishment of the desired College in one of the West Indian Colonies.

"As the outcome of this Lord Milner, the present Secretary of State, in August of last year, appointed a Committee to consider the desirability of establishing a Tropical Agricultural College in the British West Indies and to advise generally on the subject.

"The Committee so appointed is a very strong one, containing the names of men of distinction in the academic world as well as those widely known in connection with West Indian Agriculture and Commerce. With such a Committee it was possible for the many and diverse aspects of the problems to have careful and wise consideration.

"The Committee lost no time in dealing with the questions referred to them, so that on November 25th last, they were able to present their report. As His Excellency the Governor has informed you, the Secretary of State has now forwarded this report for the consideration of the Governments of all the West Indian Colonies, expressing general approval of the proposals which it contains and requesting that the widest publicity may be given to the report and to the Secretary of State's views concerning it, so that the general desire of these communities may be known in the matter and it may be learned to what extent support will be forthcoming in order to enable a Tropical Agricultural College to be established in the British West Indies.

"I deem it fortunate, and a happy omen, that I have this first opportunity of publicly discussing this report and its recommendation before a body of representatives from all the British West Indian Colonies and thus of approaching, right at the outset, every one of these Colonies. Much will depend on the reception which you give to these proposals, and I hope that I may be able to outline them in such a manner as to make the most favourable appeal to your sympathies and elicit your full support.

"Before proceeding to discuss the actual recommendations of the Committee, perhaps it may be well to consider briefly the reason why a Tropical Agricultural College is desirable.

"The past twenty years has witnessed the rise and development of Agricultural Departments in the Colonies; these departments are now recognized as necessary parts of colonial administration and that their work and activities are essential for the preservation and development of the agricultural industries of the Colonies. These departments have accumulated much knowledge and they are active in disseminating it, but the advice and instruction thus put forth is mainly addressed to those who are already engaged in the actual work of agriculture, to the older men, the actual planters; furthermore, much of the advice and instruction is directed to the special problems which are confronting those older men in their daily work, it is special advice and instruction and not orderly considered instruction intended to give its recipients the general outlook on agriculture which a proper course of training should involve. Consequently, it tends to deal with such special points as the control of pests and diseases or the special aspects of particular crops, such as sugar or cotton, while the general principles of agriculture have little discussion. There may thus arise a somewhat lop-sided manner of looking at agricultural problems so that the younger men, anxious to obtain an insight into the scientific aspect of agriculture, are led to think, for instance, that agricultural science is mainly a matter of pests and diseases, or other special matters, and lose sight of much which is fundamental and basic, thus tending through the very activity and zeal which they display to acquire warped and ill-balanced ideas, whereby their chances of becoming successful planters are impaired.

"The Agricultural Department cannot undertake this fundamental teaching in regard to agricultural matters, they have neither the men nor the facilities for such work: it requires special equipment; and this means a College.

"The College is thus necessary for the training of young men who are to carry on the agriculture of the future; the work is becoming so intricate and complex and involves the application of the knowledge and advice of so many specialists that none but trained men can hope to deal successfully with all the phases of the work and be alert to take advantage of the various favourable opportunties which arise in connection with their work and its associated business.

"But there is another aspect. Knowledge relating to tropical agriculture is not easily acquired, while it has much that is in common with the agriculture of countries having temperate

climates, it has very much which is utterly strange to those countries. The crops are different, the pests and diseases are different, the manner of handling the evil must be different, how then must the requisite knowledge be obtained? Much has been acquired by the patient working of planters in the tropics during past years and much has been added by the labour of scientific investigators still more recently, but much of this knowledge is only in the making, most of it is incomplete and scattered. The student or worker who desires to obtain information on matters pertaining to the higher phases of science as applied to tropical agriculture has a difficult task. It is very necessary then that there should be men entrusted with the duty of gathering together such knowledge as is available and presenting it to students and workers in an orderly form. Something is attempted by the Agricultural Departments, but they cannot undertake regular systematic instruction in these matters; this requires a College with its various Professors and Lecturers, whose duty it is to collate the knowledge and put it before students in a considered form for their assimilation and application.

"This idea goes far; it applies in the first place to those whose desire is to obtain a sound insight into matters of general agriculture, who desire to equip themselves mentally so as to be farmers and planters of the best and highest type. But it applies with perhaps greater force to those who require training in special matters of tropical bearing to such as wish to become the plant pathologists, the entomologists, mycologists, chemists and many other specialist workers and investigators dealing with tropical problems. Where are such men at present to get their training? General instruction in cognate matters is given in our Universities and Colleges in temperate countries, but there are few if any in British Possessions which can give detailed instruction in these matters in their tropical aspects. It is now a matter of first necessity to have somewhere within the British Empire, some institution in which men can receive training in matters pertaining to tropical agricultural affairs, where they can handle actual tropical crops and become familiar with their requirements, where the special problems relating to tropical soils can have consideration, where the future agronomists, agricultural chemists, entomologists, mycologists, economic botanists and others can be trained. This can only be done through an Agricultural College situated in the tropics, and no better place exists for such an institution than the West Indies.

"In considering this latter aspect of the training to be given, it may be pointed out that it will be of advantage to other Universities and Colleges such as those in Great Britain or Canada to be able to send their students to a Tropical College in order to complete their training by gaining first hand knowledge of tropical matters. Many of the graduates of these Universities and Colleges desire to undertake work in various tropical possessions abroad; as matters now stand they leave the institutions which train them without having had opportunities even of seeing many of the actual plants and other things with which their work is concerned; consequently, the first year or two of their time in the Colonies is spent in what is practically a period of training in order to make them familiar with the objects on which their work is based. This is a wasteful process and one which is not invariably successful.

"It is seen then that the training to be given in the College must have many aspects; it must provide instruction for the youths of these Colonies who wish to be educated in order to undertake work on plantations in the Colonies themselves; further than that, I think it should provide two grades of education even for such youths; there are those who cannot afford a long time for study, who have to turn to wage-earning work without long delay but who desire to enter on their work better equipped than those youths who pass directly from the secondary school to plantation work, for such a short course of instruction may suffice. But there are others who are able to afford time for more thorough training and who look to occupy the highest positions which agriculture can offer them: for such a longer course of study is desirable, and it is open to consideration whether they may take the whole of their course in the Tropical College, or whether some, at least, may not desire to put in part of their time at a British, Canadian or other University or College, and complete their tropical training in the West Indies. Some may do this, while others may take their whole course of study in the West Indies.

"In addition to this there must be the means of giving instruction in special lines of work in their tropical aspect in regard to such subjects as entomology, mycology, and many other branches of science; the tropical aspects cannot be dealt with in any teaching establishment outside the tropics, for museum specimens, illustrations and books cannot take the place of the things themselves, or reveal the natural surroundings in which the special tropical objects occur. Thus it is to be expected that students who have received a considerable part of their training in other Universities or Colleges, but who wish to be instructed in tropical matters, will come to the West Indies for the purpose. In this way it should be possible to give sound training to the important and ever growing body of men who wish to take up work along special lines in tropical Departments of Agriculture or in connection with large companies or private firms as specialists in plant pathology, in tropical soil problems as tropical agricultural chemists and many other lines of work, some of which are possibly not yet evident, but which will come into existence as knowledge grows and men are available to apply it.

"I am moved to dwell at some length on these aspects of the teaching which should be given in the College, for I feel that it is necessary to explain that the College is not merely intended to give instruction to local youths who contemplate becoming planters; this it must do, but it must do much more than that, and to effect its full purpose, it must from the outset have high academic ideals and status so as to command the respect and evoke the sympathy and co-operation of Universities and Colleges over the sea. Its outlook and ideals must be broad and high.

"There is one form of training that a West Indian College should be capable of giving and that is thorough instruction in the art and science of sugar manufacture. It has been pointed out on more than one occasion that there does not exist in the British Empire any institution in which a student can be trained practically in sugar technology, using the actual sugarcane and the resultant juice as the basis of the work. Such an institution exists in very complete

form at Audubon Park in Louisiana, and these West Indian Islands are largely dependent on graduates from that institution for the technologists in their sugar factories. It seems very desirable however, that there should be a British source of supply and that the West Indian Tropical Agricultural College should have an adequate Sugar School.

"We may now turn to the report of the Committee in order to see to what extent its recommendations accord with these views and how it is hoped to give effect to them.

"The first point which the Committee deal with is the desirability of establishing a College. The opinion is at once expressed without qualification or hesitation that steps should be taken at an early date to found a Tropical Agricultural College in the West Indies, and the following arguments are put forward in support in paragraphs 5, 6, 7, and 8 of the report which are as follows:

"5. *Desirability of Establishing a College.*—The Committee desire to state at the outset that they are unanimously of the opinion that steps should be taken at an early date to found a Tropical Agricultural College in the British West Indies.

"6. The need for such an institution has for some years been increasingly apparent. In order that our Colonies and Possessions may be placed in a position to compete successfully with foreign countries in the production and marketing of the staples of the tropics, it is of paramount importance that their young men should be afforded opportunities for instruction in the principles of agriculture, and in the cultivation and preparation for market of tropical produce of every kind, including especially sugar and its by-products rum and molasses, cacao, coffee, coconuts, rice, citrus, and other fruits—notably bananas, and dye-woods, many of which commodities constitute the raw materials employed in the manufactures of the Mother Country.

"7. Equally important is the need which exists of making full provision for the prosecution of research, and for the training of scientific investigators in matters pertaining to tropical agriculture amid suitable surroundings, and for creating a body of British expert agriculturists well versed in the knowledge of the cultivation of land in the tropics, and of scientific advisers possessing an intimate knowledge of the means of combating pests and diseases the control of which is fundamentally essential to the successful development of agriculture in the tropics.

"8. It has been brought before the notice of the Committee that Agricultural Colleges have been established successfully in Porto Rico and Hawaii, besides a University in Louisiana, which possesses, moreover, an unrivalled Sugar School at Audubon Park, New Orleans, and they would regard it as a reproach if Great Britain were to remain behind the United States in this matter. The Committee desire especially to emphasize the fact that the establishment of a Tropical Agricultural College in the West Indies is a matter of Imperial concern. Such a College would be of no less importance to the Mother Country than to the Colonies immediately concerned, having regard to the present necessity of developing

production throughout the Empire to the utmost extent, and to the opportunities which it would afford to students trained in agriculture at Universities in the United Kingdom to continue their training as post graduates in the tropics.

"The Incorporation and Constitution of the Colleges are dealt with in detail. They are important matters; for on them the future of the College hinges. It is proposed that the Colleges be incorporated in the United Kingdom as a company limited by guarantee. This is the procedure which is now adopted in connection with institutes, societies or other institutions formed for the purpose of promoting commerce, art, science, religion, charity, or other useful objects which do not involve the division of profits; in which case the body may be incorporated by registration with limited liability, but without the addition of the word "Limited" to its name. This is the course which, for example, is being followed by the various Scientific Research Associations which are being established in the United Kingdom. Constitution in this manner will give the College definite status and confer certain advantages.

"It is recommended that the affairs of the College shall be administered by a Governing Body composed of Trustees and Governors whose meetings shall ordinarily be held in London, but they shall appoint from their body an Executive Committee whose meetings shall be held in the Colony in which the College is situated. This arrangement appears to me to be an admirable one: it creates a body of men who meeting in England, may be looked to to take the broadest views concerning the work of the College and its management. They will be in close touch with those having interests in tropical agricultural affairs, with scientific and educational authorities and with the Government: this should ensure that the College is free from the reproach of insularity or narrowness, while the existence on the spot of the Executive Committee should ensure that due weight is given to all local requirements and permit of prompt, rapid action in essential matters without delay arising from the necessity of referring matters of detail to England for the consideration of the Body of Governors.

"It is proposed that the Governing Body shall be nominated by those interested in its work and welfare. It is suggested that two members shall be nominated by the Secretary of State for the Colonies, one member by the Academic Board of the College. Members are to be nominated by the several Colonies participating in the College; it is anticipated that there may be six such members, one each nominated by Barbados, British Guiana, Jamacia, Trinidad and Tobago, the Leeward Islands and the Windward Islands.

"Three members are recommended to be nominated by Academic Institutions in the United Kingdom, a matter which the Committee regard as of the highest importance. The suggestion is made that the various Academic Institutions shall be placed on a roster and invited to nominate representatives in such order as may be determined; it is recommended that in the first instance the University of Cambridge, the University of Glasgow, and the Imperial College of Science and Technology of London shall be invited to nominate each one representative.

"A group of members is to be nominated by contributing industries; it is thought that the number may vary, but in the first instance, it is considered possible that the number may be five—namely, one each representing the cacao, cotton, coconut, fruit growing and sugar industries, respectively.

"It is recommended that there shall be two *ex officio* members—namely, the senior or Financial Officer of the Colony in which the College is situated and the Principal of the College.

"There are also to be four co-opted members, two of whom are to be selected in respect of their ability to serve also as members of the Finance Committee of the Governing Body, the other two in respect to their ability to serve as members of the Executive Committee.

"As thus constituted, the number of the Governing Body would be twenty-three. Although this number may seem large, it is believed that it will not be unwieldly, particularly in view of the fact that several members will constitute the Executive Committee, which will sit in the Colony in which the College is situated.

"Recommendations are made concerning the Staff of Professors and Lecturers and the Curriculum. In regard to the latter it is observed that the details concerning the institution to be given to the students should be settled by the Academic Board but the suggestion is made provisionally that there may be:

(*a*) A junior course of instruction in tropical agriculture extending over two, or possibly, three years. This course should be arranged to meet the requirements of youths leaving the secondary school of the Colonies who intended to follow ordinary agricultural pursuits, probably in the Colony from which they come.

(*b*) A senior course of similar instruction extending over not less than four years.

(*c*) A course of two years' instruction in more advanced tropical agriculture, for students who have undergone a course of instruction in general agriculture in a recognized institution, such as a University College or an Agricultural College. This course would practically coincide with the final two years' teaching of the last-named course (*b*).

(*d*) Post-graduate study of special agricultural subjects in their tropical application as, for example, entomology, mycology, chemistry, plant breeding, and the general study of special crops, such as sugar, cacao, cotton, coconuts, rice and variety of others to be arranged to meet the requirements of the students. These studies would be carried on through the College, in association with the Imperial Department of Agriculture through the medium of such Local Agricultural Departments and experiment stations as appear to be particularly suited for the work.

"Special mention of the Sugar School is made as follows: Recognizing the urgent need which exists for the provision of scientific and technical training in sugar manufacture, the

Committee strongly recommend that a Sugar School equipped with a complete plant on a small, but working, scale be established in connection with the College. They believe that the leading sugar machinery manufacturing firms would be willing to contribute different portions of this plant.

"It may be added that the establishment of such a Sugar School may well be made a special feature of the College, so as to provide the much-needed general instruction in sugar making and the education of the sugar technologists, whose services are essential for the working of modern sugar factories. The existence of such a school with its machinery and appliances cannot fail to be stimulating in connection with sugar manufacture generally; not only should it provide means for giving general instruction, but it should afford opportunities for investigations in matters connected with sugar manufacture and it may confidently be hoped that many improvements would be the outcome of such investigations, while the introduction of new processses into British West Indian sugar factories should be greatly facilitated.

"The view is expressed in the report that the College should work in close association with the Imperial Department of Agriculture.

"*Financial Arrangements.*—The Committee state that in approaching the question of ways and means, they have constantly had in view the fact that though the Tropical Agricultural College would be located in the West Indies it would be, to a great extent, Imperial in its scope and activities; it being expected, for example, that the senior students would be post-graduates of British Universities and Colleges, and that many of the students trained in the College would be available for service throughout the Empire. Apart from this they would point out, as stated in an earlier paragraph of their report, it would be manifestly to the benefit of the Mother Country that production should be extended in the British West Indies on scientific and remunerative lines. They would emphasize moreover in this connection, that, of the American Agricultural Colleges to which reference has already been made, that of Porto Rico, at any rate, is subsidized by the United States Government. In order to provide the requisite ways and means for the establishment and maintenance of the West Indian Tropical Agricultural College, the Committee recommend that

(1) For the establishment of the College, a fund of £150,000 and upwards should be raised by private subscription.

(2) For the maintenance of the College:

(*a*) Annual contributions should be invited from the various West Indian Colonies on the basis of the equivalent of, say, half per cent. of their average revenue during the preceding three years, and each Colony, in return for its contribution, should have the right to nominate a representative to sit on the Governing Body and to enjoy special privileges in respect to its students; it being understood in this connection that the constituent islands of the Windward Islands group should be regarded as one Colony.

(*b*) Annual contributions should be invited from the Imperial Government as grants-in-aid, on the basis of £1 for every £1 contributed by the Colonies, the liability of the Imperial Government, however, should not exceed £15,000 in one year.

(*c*) Voluntary contributions should be invited from industrial organizations and individuals interested in tropical industries.

"The Committee feel very strongly that the claim for Imperial assistance would be fully justified by the Imperial nature of the work to be undertaken.

"The report then states the Committee also feel that if their recommendations meet with Lord Milner's approval, it would greatly facilitate the collection of contributions from those interested in tropical industries if his Lordship would himself issue the appeal.

"These financial recommendations appear to be clear and to be such as will meet the circumstances. It is earnestly hoped that they will commend themselves to all who are interested and concerned in the matter.

"In his despatch inviting the consideration of the Governors of all the West Indian Colonies of the report, a copy of which has been laid upon the table of this meeting by His Excellency the Governor, Colonel Amery, on behalf of Lord Milner, states that he feels serious difficulty about the proposal that the Imperial Government should be asked for financial assistance. Colonel Amery goes on to say that he readily admits that the proposed College is of great importance to the United Kingdom and to the Empire at large. But there are many educational institutions in the United Kingdom which are similarly of importance to the Colonies, although it is only in a very few cases that the latter make any contribution. The considerable measure of prosperity which many of the West Indian Colonies are now enjoying further weakens the case for Imperial assistance. I shall defer, Colonel Amery writes, further consideration of this point until I have the views of the Colonies, but if Imperial assistance is not forthcoming it will evidently be necessary to raise the suggested rate of Colonial contribution.

"Personally, I feel that the claim of the Tropical Agricultural College for Imperial consideration is very strong, indeed, the Imperial aspect of the College appears to me as strongly as the West Indian aspect, the College is calculated to give instruction and to strengthen knowledge in matters concerning tropical agricultural affairs relating to the whole Empire and to assist in training men, particularly specialists, in tropical agricultural subjects for service far beyond the confines of the West Indies. While the College should be of very great value and service to the West Indies, it should prove a poineer for the Empire in many directions. I trust, therefore, that this may weigh with the Imperial Authorities whose aid we desire to secure.

"The question of the site for the College is discussed by the Committee, but the matter is not finally settled.

"After careful consideration it was evident to the Committee that either Trinidad or Jamaica offered a site that would be suitable. It was fortunate that both Sir Leslie Probyn, K.C.M.G., Governor of Jamaica, and Major Sir John Chanceller, K.C.M.G., D.S.O., Governor of Trinidad and Tobago, together with Mr. T. V. Best, C.M.G., O.B.E., Colonial Secretary of Trinidad and Tobago, and Mr. P. C. Cork, C.M.G., late Colonial Secretary of Jamaica, were in England at the time the Committee were sitting, so that the Committee were able to have the benefit of their views, while at the same time they had the opportunity of stating to the Committee the facilities and advantages offered by the respective Colonies.

"The question of the site for the College was the subject of much discussion. It is desirable that I should give the actual words of the report in reference to this important matter: they are as follows. Paragraphs 10, 11, 12, and 13:

"10. After carefully considering the matter in all its aspects, and with special reference to the geographical position and grouping of the various West Indian Islands and British Guiana, and to the general desire that the College should be closely associated with the Imperial Department of Agriculture, the Committee recommend that the Tropical Agricultural College be established in Trinidad, provided that the Government of Trinidad and Tobago is prepared to afford it adequate support and every reasonable facility.

"11. In arriving at this decision the Committee were influenced by the fact that Trinidad possesses a wide variety of industries and is easy of access by steamer communication to residents in the neighbouring islands and British Guiana.

"12. The Committee recognize that the claims of Jamaica have great weight, this Colony having a population approximating to that of the rest of the West Indian islands, and a still wider variety of industries than that possessed by Trinidad. They feel, however, that difficulties of inter-colonial transit would form a serious obstacle to their transfer of the Imperial Department of Agriculture to Jamaica if, as is so much desired, the islands of the Lesser Antilles are still to derive immediate advantage from the work of that useful body.

"13. Mr. E. A. de Pass strongly urged the claims of Jamaica, but the Committee reluctantly feel that owing to its geographical position Jamaica must to some extent be treated as a separate unit in this matter. In view however, of the great importance of that island's agricultural interests there should, in their opinion, be intimate co-operation between the Jamaica Agricultural Department and the Imperial Department of Agriculture, and the Committee believe that it would be of advantage to Jamaica to identify itself with the proposed Tropical Agricultural College. The Committee further suggest that the usefulness of the organization at present existing in Jamaica for agricultural training and research might be extended by a modification in the case of that island of the financial proposals contained in a later paragraph of this report, so that Jamaica's contribution and the proportion of any Imperial grant added thereto might be divided between the funds of the proposed College and a local Agricultural School.

"The claims of Barbados were also closely considered; but could not be entertained owing to the smaller range of that island's products.

"The report states that the report had been approved. The Committee held a further meeting to consider the following telegram received on November 5th by Mr. E. A. de Pass from Mr. A. W. Farquharson, Chairman of the Jamaica Imperial Association.

"Financial majority Elected Members agree support initial grant 150,000 and 15,000 annually towards Agricultural College if Jamaica made head-quarters Imperial Department of Agriculture Farquharson.

"In this connection the Committee whilst adhering to the recommendations contained in their original report, suggest that in the event of Trinidad and the Windward and Leeward Islands not seeing their way to support adequately the proposed Tropical Agricultural College—a contingency the Committee hope may not arise—the possibility of establishing the College in Jamaica may again be considered. The question as to the site of the Imperial Department of Agriculture does not come within the terms of reference to the Committee, though they have found it necessary in the course of the report to refer to this important aspect of the question.

"These statements will enable you to understand the recommendations of the Committee and their general acceptance, with some reservations, by the Secretary of State, and to this I may add that I have the personal assurance of Lord Milner and of Colonel Amery of their very great interest in the matter and their desire to bring it to a successful issue at an early date. At the same time I am assured by many of the senior officials of the Colonial Office of their desire to see the College successfully established, in the belief that it should, and doubtless will, prove of very great benefit not only to the West Indies but also to tropical agriculture the world over.

"In conclusion let me remind you that the desire is to found a Tropical Agricultural College of high academic standing, which will have the duty, not only of giving instruction to young men who desire to engage themselves in agriculture in these Colonies, but also of affording instruction in matters pertaining to agricultural sciences in their tropical aspects, thus supplementing the training that may be given in British Universities and Colleges and kindred institutions and thus enabling specialist workers to go out better equipped than has been possible hitherto, thus obviating the necessity for their learning the details of their tropical work while actually carrying on the duties of posts to which they are appointed, a condition which presses heavily alike upon the workers and upon those who employ them.

"I feel that I can cordially commend the object of the proposed College to your serious and favourable consideration and I trust that when you return to the various Colonies whose interests you are representing at this Conference, you will be able to participate in the discussions which will take place concerning the proposed College and the part which each Colony will be called upon to play in respect to its founding, and in these discussions that you will feel that it is your agreeable duty to advise the fullest support to the College as a means of real advancement of tropical interests in general and of West Indian interests in particular."

MINUTES OF THIRTEENTH ANNUAL GENERAL MEETING OF THE PLANTERS' ASSOCIATION OF MALAYA,

held at 12, Market Street, Kuala Lumpur, on 28th April, 1920, at 11 a.m.

PRESENT:

The Honourable Mr. F. G. Harvey (*Chairman*)
Mr. J. W. Kennedy (*Vice-Chairman*)
„ C. Ward-Jackson (*Secretary*)

and the following members:

From the	Bahau-Kuala Pilah D.P.A.	Messrs. A. L. Simmons, T. W. Browne and C. W. Keppel-Powis
„	Batang Padang D.P.A. ...	„ C. Darby, D. Billings and C. B. Graburn
„	Batu Tiga D.P.A. ...	„ T. J. Cumming, Alec. Douglas, W. E. Hilton-Ross, V. C. Manners, J. A. Robertson and W. S. Reeve-Tucker
„	Central Pahang P.A. ...	Viscount R. de Bondy and Mr. S. K. Wickwar
„	Central Perak P.A. ...	Messrs. A. B. Milne, J. S. Ferguson and W. A. Shelton-Agar
„	Johore P.A. ...	„ W. B. Campbell and C. Bradbery
„	Kajang D.P.A.	„ K. G. Furley, G. L. O'Hara Hickson and Major C. Burn-Murdoch
„	Kapar „	„ E. A. Ash, H. Case and Major C. R. Waite
„	Kedah P.A.	„ E. D. Lane and J. Wilson
„	Klang D.P.A.	„ J. French, R. Napier Hendrie, Charles Harrison and S. C. Yeomans
„	Kuala Langat D.P.A. ...	„ A. Keightley Smith, J. Firth Fletcher, O. Fenningworth and Capt. H. L. Carter
„	Kuala Lumpur „ ...	„ F. Clyde Jeavons, C. J. Arnold, H. H. Bell, W. Leggatt, G. R. S. Whittle, F. S. Williams, Jas. Neilson, R. J. Aylward, P. A. Winter, Cyril Hughes, J. Grieve, D. S. Ainger and Thos. H. Menzies
„	Kuala Selangor „ ...	Major A. B. Sloe, Capt. J. M. Ferguson and Mr. William Gordon
„	Lower Perak P.A. ...	Messrs. W. R. C. Gray and A. Pritchard
„	Malay Pen. Agric. Assn....	„ G. D. B. Turnbull, F. Duncan. Hindley and Major H. Gough,
„	Negri Sembilan P.A. ...	„ J. Bruce, H. B. Clifton, W. J. Doughty, R. Gooch, W. R. M. Fowler, C. H. Swinton, C. Ritchie, C. H. Ryves and F. J. Fane
„	Ulu Selangor D.P.A. ...	„ R. M. Newton and L. W. Tivy

HONORARY MEMBERS.—Messrs. W. Duncan and L. Lewton-Brain (Director of Agriculture, F.M.S.).

VISITORS.—Messrs. A. F. Davies, H. F. Browell, J. S. Fletcher and K. Browne.

PRELIMINARY.

Mr. Harvey wishes to point out that this is the annual general meeting of members of the Association and not an ordinary meeting of delegates. He, therefore, rules out of order the proxies forwarded by the Lower Perak Planters' Association.

1.—MINUTES.

On the motion of Mr. Ferguson, seconded by Mr. F. Clyde Jeavons, the minutes of the meeting of 28th January, 1920, are confirmed.

2.—WAR RELIEF FUND.

The Secretary tables the following statements of accounts of the Planters' War Relief Fund of Malaya, and the Federated Malay States War Relief Fund, Scheme No. 2:

PLANTERS' WAR RELIEF FUND OF MALAYA.

Subscriptions received from April, 1919 to 31st March, 1920.

	$ c.	$ c.
Batang Padang D.P.A. ...	60.00	
		60.00
Batu Tiga D.P.A.		
Bennett, G. H. ...	25.00	
Begg, N. G.	25.00	
Chalmers, A. P. ...	15.00	
Gilman, M. A. P. ...	30.00	
McNeill, F.	30.00	
Orr, Douglas, H. ...	60.00	
Robertson, J. R. ...	10.00	
Webb, C. M. ...	5.00	
Williamson, J. ...	10.00	
		210.00
Central Pahang P.A.		
Sungei Bulit Estate...	10.00	
		10.00
Central Perak P.A. ...	562.00	
Caldwell, W. J. ...	80.00	
Jonklas, W. O. ...	20.00	
Robins, N.	5.00	
Wilson, T. K. ...	150.00	
		817.00
Carried forward		1,097.00

	$ c.	$ c.
Brought forward		1,097.00
Johore P.A. ...	120.00	
Segamat Estate ...	35.00	
Adamson, H. A. ...	30.00	
Bolton, G. V. ...	120.00	
Lanadron Estate ...	50.00	
Ross, D. A.	160.00	
Nordanal Estate ...	50.00	
		565.00
Kajang D.P.A. ...	120.00	
Clerk, G. P.	20.00	
Cummins, E. N. T. ...	25.00	
Dakaynes, O. P. ...	50.00	
Ferrers, C. R. ...	220.00	
Kindersley, R. C. M.	50.00	
Mesney, R. F. ...	30.00	
Moullin, H. R. ...	75.00	
Paul, C. K.	40.00	
Schwebe, E. M. ...	40.00	
		670.00
Kapar D.P.A.		
Pratt, J. C.	27.00	
Stonehewer, R. S. ...	17.00	
		44.00
Carried forward		2,376.00

	$ c.	$ c.
Brought forward		2,376.00
KELANTAN P.A.		
Anderson, W. G. ...	50.00	
Archer, L. D. ...	45.00	
		95.00
KLANG D.P.A. ...	17.86	
Biddlecombe, H. T. A.	36.00	
Greenhill, R. D. ...	50.00	
Gulland, D. L. ...	10.00	
Napier Hendrie, R. ...	20.00	
Latimer, T. M. ...	20.00	
Maguire, C.	30.00	
Roberts, C. L. ...	30.00	
		213.86
KUALA LANGAT D.P.A.		
Irvine, D'Arcy, H. C.	30.00	
Lendrum, J. B. ...	45.00	
Mann, J. P.	30.00	
Munro, R. W. ...	60.00	
Symons, G. O. W. ...	40.00	
		205.00
KUALA LUMPUR D.P.A.		
Armstrong, H. ...	30.00	
Barnett, G. P. ...	275.00	
Campbell, F. M. ...	50.00	
Coppens, P.	20.00	
Douglas, J. B. ...	16.65	
Fox, A. J.	220.00	
Fraser, W. D. ...	40.00	
Harvey, T. R. ...	30.00	
Laddell, R. G. ...	20.00	
McCrow, D. W. ...	30.00	
Smith, Sharp, M. ...	282.81	
		1,014.46
KUALA SELANGOR D.P.A.		
Gordon, W. M. ...	187.00	
Irving, L. A. ...	30.00	
E. D. M. K. K. ...	40.00	
		257.00
LOWER PERAK P.A.		
Bayley, H.	45.00	
Dell, W.	20.00	
Hargreaves, J. ...	40.00	
McLead, R. A. ...	40.00	
Carried forward		4,161.32

	$ c.	$ c.
Brought forward		4,161.32
LOWER PERAK P.A.—(*cont.*)		
Pickering, J. T. ...	5.00	
Ratani Estate Staffs	59.77	
Symes, A. B. ...	45.00	
Tobutt, K. T. ...	10.00	
Wilson, R. J. ...	5.00	
		269.77
M. P. A. A.		
Barber, E.	45.00	
Bukit Mertajam Estate	272.00	
Careless, H. G. ...	36.00	
Josselyn, E. W. ...	60.00	
Rubber Estates of Krian	79.00	
		492.00
NEGRI SEMBILAN P.A.		
Adair, H.	30.00	
Burgess, J.	20.00	
Clerkson, S. W. ...	10.00	
Fenton, P. D. ...	20.00	
Grant, G.	20.00	
Handover, W. P. ...	40.00	
Hay, J. B.	34.00	
Payment by H. K. B.	20.00	
Hearn, A. J.	30.00	
Kellit, W.	60.00	
King, H. W. F. ...	60.00	
Maycock, R. M. A. ...	40.00	
Paterson, A. F. ...	30.00	
Ritchie, C.	30.00	
Reynolds, K. P. ...	80.00	
Sepang Valley Estate	500.00	
Smith, E. E.	60.00	
Tayler, V. A. ...	50.00	
		1,134.00
TAIPING P. A. ...	130.00	
Moraes, H. F. ...	30.00	
Perera, C.	15.00	
		175.00
ULU SELANGOR D.P.A. ...	50.00	
Brunton, R.	20.00	
Coe, P. F.	110.00	
Kennedy, C.	30.75	
		210.75
Grand Total ...		6,442.84

FEDERATED MALAY STATES WAR RELIEF FUND, SCHEME No. 2. STATEMENT OF ACCOUNT, TO 31st DECEMBER, 1920.

Receipts.	Amount. £	s.	d.
Balance from last account...	38,083	14	0
Contributions from the Sungei Kapar Rubber Co., Ltd., received through the Rubber Growers' Association	60	0	0
Refund of Income Tax deducted from Interest on Investments	453	4	8
Interest on Investments...	511	8	9
Interest on Current Account	11	0	0
	39,119	7	5

Payments.	£	s.	d.	Amount. £	s.	d.
Grants and gratuities:						
Mrs. ——	50	0	0			
,, ——	30	0	0			
,, ——	30	0	0			
,, ——	30	0	0			
,, ——	30	0	0			
,, ——	20	0	0			
,, ——	15	0	0			
,, ——	30	0	0			
,, ——	25	0	0			
,, ——	75	0	0			
,, ——	9	0	0			
Mr. ——	20	0	0			
,, ——	76	6	0			
,, ——	25	0	0			
,, ——	25	0	0			
,, ——	20	0	0			
				515	6	0
Postages, Telegrams and Sundries				0	12	9
Balance in hand				38,603	8	8
				39,119	7	5

The balance of £38,603 8*s.* 8*d.* is disposed of as under:

	£	s.	d.
Five per cent. War Loan (£12,000) at cost	11,400	0	0
Five per cent. National War Bonds	21,000	0	0
Four per cent. Funding Loan	2,000	0	0
On deposit with Chartered Bank of India, Australia and China	3,000	0	0
£ s. d.			
Balance of current account in Chartered Bank 1,482 1 5			
Less outstanding cheques 278 12 9			
	1,203	8	8
	38,603	8	8

(Sd.) W. T. Taylor,
19th January, 1920.

I hereby certify that I have audited the above statement of receipts and payments with the books and vouchers of the Fund and find the same to be correct. The grants have all been duly authorized by Committee.

73, Basinghall Street, E.C.
23rd January, 1920.

(Sd.) A. H. Cullen,
Chartered Accountant,
Honorary Auditor.

Mr. HARVEY announces that money is still coming in to the War Relief Fund although it was decided to close the fund at the end of the Association's financial year on March 31st last. He asks the meeting to decide what shall be done with the balance in hand of $2,205.55. There are two alternatives. It could be returned to the banks, or better still be passed to the credit of the Planters' Benevolent Fund of Malaya. He proposes that the latter course be agreed upon.

Mr. CUMMING seconds the proposal.

Mr. FANE suggests that District Planters' Associations be circularised with a view to ascertaining what subscriptions they have in hand before remitting the money to the Planters' Benevolent Fund of Malaya.

This is agreed to.

Mr. HARVEY states that an appeal will shortly be issued on behalf of the Planters' Benevolent Fund of Malaya and he hopes that all planters will make a generous response, especially in view of the facts that the fund had of late, through the large amount of relief granted, to draw upon its capital and that the War Relief Fund is now closed.

3.—REPORT AND ACCOUNTS.

Mr. HARVEY formally presents the report and accounts for the past year. He refers to the difficulty in getting the printing done quickly at the present time; and states there are one or two printers' errors which crept in inadvertently.

On the motion of Mr. Fane, seconded by Mr. Harrison, the report, subject to the following corrections, is adopted.:

Page 2,	line 28,	*read* 30	*for* 29
„ 4	„ 2	„	1,054,248¾	*for* 1,051,017¼
„ 4	„ 5	„	705,019½	*for* 703,672½
„ 4	„ 7	„	513,476	*for* 511,295½
„ 4	„ 9	„	575	*for* 574
„ 10	last line	„	over-estimated	*for* under-estimated
„ 17	line 13	„	facilities	*for* difficulties.

Mr. HARVEY refers to two items in the accounts—namely, the sum of $712.46 for postages, telegrams and telephones, which he explains is high because telephone rent for 1919 and 1920 and the cost of a cable to London $210.33 regarding the "Marama" are included therein; and the sum of $890 in connection with the Planters' Association of Malaya Rice Distribution Scheme. This latter item, he suggests, be altered to suspense account and be left to the Standing Committee to decide whether it shall be recovered from the estates which benefited under the scheme.

On the motion of Mr. Shelton-Agar, seconded by Mr. Leggatt, the accounts are passed, subject to the alterations referred to.

4.—ELECTION OF CHAIRMAN AND VICE-CHAIRMAN.

Mr. HARVEY announces the following result of the voting for the Chairman of the Association:

Mr. J. W. Kennedy	...	211 votes
„ W. A. Shelton-Agar	...	55 „
„ Thos. H. Menzies	...	51 „

He has much pleasure therefore in declaring Mr. Kennedy elected Chairman for the ensuing year, and is sure Mr. Kennedy will make a good Chairman, as he has had a good deal of experience as Vice-Chairman, and his ability as a speaker is already well known. He is sure that members of the Association will accord Mr. Kennedy their hearty support during his year of office.

Mr. HARVEY announces the following result of the voting for Vice-Chairman:

Mr. J. Bruce	...	147 votes
„ J. S. Ferguson	...	114 „
„ P. N. Mitford	...	39 „

He therefore has pleasure in announcing Mr. Bruce elected Vice-Chairman. He explains that Messrs. F. Clyde Jeavons and W. S. Reeve-Tucker acted as scrutineers of the voting papers.

Mr. HARVEY vacates the chair which is occupied by Mr. Kennedy.

Mr. KENNEDY thanks the Association for the honour they have conferred upon him in electing him Chairman and has no hesitation in saying that the position is one to which he has always aspired. He feels he has been more than repaid for the work he has done for the Association, and realizes to the full the responsibility of his position which he is aware is difficult to fill with success, especially is this so considering that he follows so energetic and able a Chairman as Mr. Harvey. He is grateful for the trust that has been placed in him and is sure, with the assistance and co-operation of members, that he will be enabled to discharge the responsibility of the office to the best of his ability. He would take the opportunity of acknowledging the good work done by Mr. Harvey during his term of office. He thinks he is safe in saying that there has never been a member of the Planters' Association of Malaya who has done such good and hard work consistently as Mr. Harvey, whose views on all matters were eagerly sought for and highly valued. He realizes and acknowledges that the Association owes him a debt of gratitude for his signal services. He understands Mr. Harvey is shortly proceeding to England on retirement from active work after many years of strenuous labour in Malaya, and his departure will cause them to lose one of their keenest agriculturists and honoured citizens.

On behalf of the Association, he tenders to Mr. Harvey its grateful thanks for the work he has done in the past, and its hearty wishes that he may be spared long to enjoy the fruits of his labour.

Mr. HARVEY heartily thanks Mr. Kennedy and the Association for their appreciation of his work. He says that he was connected with the United Planters' Association of Malaya and afterwards with the Planters' Association of Malaya ever since Mr. W. W. Bailey

occupied the chair of the United Planters' Association in 1905. He thinks Mr. Kennedy's panegyric is somewhat exaggerated as there have been many better men before him as Chairman who have given of their best to the Association. He says he is not temperamentally suited to occupy the chair of an Association like the Planters' Association of Malaya as he is impatient of criticism and not good tempered. He knows, however, that what work he has performed has been done sincerely. He thinks an association like the Planters' Association of Malaya is unique because planters were called upon every day to make up their own minds, and it became second nature to them to act upon their own initiative. Thus they come to meetings of the Planters' Association of Malaya with definite views from which it is sometimes difficult to dissuade them. He thanks Mr. Kennedy, the members of the Standing Committee and the members of the Association for the hearty support given him during his term of office. His prime object in accepting the chairmanship was because disunion was rife among certain District Planters' Associations and he had endeavoured to restore that unity without which the Association could never progress. He was distressed the previous night to read in the *Malay Mail* that one of the Constituent Associations was threatening to secede from the Planters' Association of Malaya. As a set off against this, however, he is pleased to hear of the action of the Kajang District Planters' Association in the matter of those estates which left that Association some time ago, and wishes to take off his hat to Major Burn-Murdoch for his laudable attempt to bring about unity among planters in the Kajang district. It has always been a matter of regret to him that many members of the Association are unknown to him. He has not travelled up and down the country very much and so has not become intimate with a large number of planters, especially is this so with regard to Perak planters. He is sorry he is shortly to leave Malaya but he still hopes when at home to do something to improve conditions under which planters live, in the way of better bungalow accommodation, and any benefits which may result from his work he is sure will be appreciated by the planting community. He wishes to remove any impression that may be abroad that he is being sent home to stand his trial for profiteering. He leaves of his own free will. He again thanks the Association for its appreciation of his work.

Mr. Bruce briefly returns thanks for the honour that has been conferred upon him in electing him as Vice-Chairman, a position to which, unlike Mr. Kennedy, he has never aspired.

5.—ALTERATION OF RULES.

The Secretary submits the following draft rules and appendices thereto:

The Planters' Association of Malaya.

DRAFT RULES.

The following is submitted by the Chairman, the Hon. Mr. F. G. Harvey:

1. The name of the Association shall be The Planters' Association of Malaya.

2. The object of the Association is to represent, protect and advance the planting industry of Malaya.

3. The head-quarters and office of the Association shall be in Kuala Lumpur.

4. The Association shall consist of the Chairman and Vice-Chairman for the year and of delegates from Constituent Associations.

5. The Association shall have power to admit to membership any existing Association of planters in the Malay Peninsula and any such Association that may be established, such bodies shall thereupon become Constituent Associations and shall be entitled to the same benefits and be subject to the same obligations as the other Constituent Associations of the Planters' Association of Malaya.

6. Each Constituent Association shall register with the Secretary not later than 15th January each year all data required for calculating the amount of subscriptions due to the Association for the ensuing year.

7. The annual contribution from each Constituent Association shall be assessed on such basis as may be determined once a year at the annual general meeting, and shall become due and payable on election and thereafter on the 1st day of May in every year, and no Constituent Association shall have the right of voting or otherwise enjoy any of the privileges of the Association until such annual subscription shall have been paid.

8. A general meeting of the Association shall be held in the month of April in every year. Such meeting shall be called the annual general meeting.

At such meeting all members of Constituent Associations shall have the right to attend and vote. Twenty-one days' notice of any resolution to be brought before such annual meeting shall be given in writing to the Secretary. This meeting shall

(i) receive the accounts and report of the past financial year, which shall close on the 31st of March of every year;

(ii) elect or declare elected a Chairman and Vice-Chairman for the current year;

(iii) receive estimates and determine the amounts and basis of subscription for the current year;

(iv) transact any other business which may rightly be brought before the meeting, or of which due notice shall have been given.

9. Ordinary meeting of delegates shall be held quarterly, and at such meetings each Constituent Association shall be represented by one delegate for every 10,000 or part thereof of the planted acres represented by its members, and such delegates shall have one vote.

10. Emergency ordinary meetings shall be convened at any other time upon a requisition in writing made by three Constituent Associations, or by the Standing Committee.

11. At such general and ordinary meetings, ten delegates present in person or by proxy shall be a quorum.

12. The following notice of meetings shall be given:

(i) in the case of annual and ordinary meetings not less than 21 days by letter;

(ii) in the case of emergency ordinary meetings not less than seven days by telegram.

13. Candidates for the Chair and Vice-Chair must be nominated by a Constituent Association, and the persons nominated must signify in writing their willingness to be so nominated.

All nominations must be in writing on a form to be prescribed by the Standing Committee and obtainable on application to the Secretary and should reach the Secretary not later than March 15th, each year.

14. The names of candidates duly nominated shall be placed on the agenda for the annual general meeting and only such candidates shall be eligible. Provided that should no candidate have been nominated as aforesaid, the annual general meeting shall elect the Chairman and Vice-Chairman for the ensuing year.

15. Voting for the election of Chairman and Vice-Chairman shall be by voting papers on a form to be prescribed by the Standing Committee issued at least 15 days before the annual general meeting to all Constituent Associations in accordance with the number of their members.

16. The Chairman and Vice-Chairman of the Association shall hold office for one year only, but shall be eligible for re-election.

17. The Standing Committee shall have the following general powers and duties:

(*a*) to deal with matters of importance requiring immediate decision;

(*b*) to make and give receipts, releases and other discharges for moneys payable to the Association and for the claims and demands of the Association and to delegate such powers to the Secretary or Treasurer of the Association or any one or more of its number;

(*c*) to delegate subject to such conditions as they may think fit, any of their powers to sub-committees of such member or members of the Standing Committee as they may deem expedient, and to make such representations as to the proceedings of such sub-committees as they may deem proper;

(*d*) to appoint, suspend or remove the Secretary, Treasurer or other servants of the Association and fix their remuneration and determine their duties;

(*e*) from time to time to provide for the management of the affairs of the Association in such manner as they may think fit, and generally to do all such things as they think expedient for the purposes of the Association.

18. The Standing Committee shall be declared elected at each annual general meeting and this shall be composed of the Chairman and Vice-Chairman of the Association *virtute officii* and of 10 or more members to be elected by Constituent Associations.

These members shall be elected on the basis of the planted area of each State or Territory as represented by the Constituent Associations of that State or Territory and such elected members shall be the representatives on the Standing Committee for that State or Territory.

The allotment of representatives for each State or Territory shall be calculated according to the following schedule:

Over	180,000	acres	...	...	...	5	representatives
Under	18,000	and over	140,000	acres	...	4	„
„	140,000	„	100,000	„	...	3	„
„	100,000	„	60,000	„	...	2	„
„	60,000	„	15,000	„	...	1	„
„	15,000	„	...	....	...	No	„

Under rule 6 it is incumbent upon Constituent Associations to register by the 15th day of January the acreage represented by each. Before the last day of February, the Standing Committee shall draw up a statement showing the acreages thus represented and shall allocate such acreages to each State according to the geographical situation or according to the situation of the recognized office of such Constituent Association, or in any other way that may seem fair and reasonable. A summary of this allocation shall then be distributed to each Constituent Association and in accordance with the total acreage allocated to each State and in accordance with the above schedule the number of representatives for that State on the Standing Committee shall be determined and notified to each Constituent Association.

Voting papers for such number of representatives shall be sent to each Constituent Association and such voting papers shall be filled in by such Constituent Association and returned to the Secretary before the last day of March. Such voting papers must be signed by the Chairman and Secretary of each Constituent Association.

The chosen representatives need not necessarily be resident in the State or Territory to which the Constituent Association belongs.

The names of the chosen representatives will be notified at the annual general meeting, and declared elected.

19. The Association shall have power to elect as honorary members such persons as they shall think fit; but such persons shall not be entitled to vote at any meeting of the Association. Notice of any proposal for the admission of an honorary member together with the names of the proposer and seconder of such honorary member, shall be given to the Secretary of the Association at least a fortnight previous to the meeting at which the election of such honorary member shall take place and the Secretary shall put on the agenda for such meeting the name and address of such person and the names of the proposer and seconder.

20. All members, who shall have served the office of Chairman of the Association for at least one year, shall *ipso facto* become honorary members of the Association.

21. An instrument appointing a proxy shall be in the form and to the effect following:

22. I, the undersigned.....delegate to the Planters' Association of Malaya, do hereby appoint .....a member of the Planters' Association of Malaya, to be my proxy, to vote and act for me at the meeting which is to be held on the.....day of 19.....

Signature.....

Dated this.....day of.....19.....

A proxy is available for one meeting only, and requires a three-cent stamp which must be cancelled. It shall be deposited at the office of the Association at least three days before the time for holding the meeting.

23. The Chairman at the beginning of every meeting shall submit the minutes of the previous meeting for confirmation.

24. No proposal for altering the minutes shall be in order, except on a question of the accuracy of the said minutes.

25. In the event of there being no proposal for an alteration of the minutes and in the event of there being such a proposal and of it being agreed to by a majority of members present, the Chairman shall certify the minutes as correct and confirmed, after having in the second event altered them accordingly.

26. Any alteration of or addition to the rules of the Association shall require a majority of two-thirds of members represented at the annual general meeting or at a special general meeting convened for that purpose.

27. In the event of any question or matter arising not provided for in the rules, the decision of the majority shall in all cases be final.

Appendix I.

Example Under Rule 18.

According to the present acreage returns and the schedule, Selangor would be entitled to five representatives on the Standing Committee. There are eight Constituent Associations in Selangor. To each of these a voting paper for five names would be sent. Each of the eight Constituent Associations would before the end of March hold a meeting and elect five *Members of the Planters' Association of Malaya* (not necessarily members of the Constituent Associations or even of Selangor) and fill in the voting paper accordingly. There would be eight voting papers from Selangor and the five members obtaining the largest number of votes according to the eight returns would become the elected representatives of Selangor.

Appendix II.

PLANTED ACREAGES ACCORDING TO STATES AND PROVINCE, AS AT 31ST MARCH, 1920.

Selangor	200,987	acres.
Perak, P. W. and Penang ...	196,476	„
Negri Sembilan	108,033	„
Johore	82,402	„
Kedah	35,700	„
Kelantan	15,303	„
Pahang	3,712	„
	642,613	„

Therefore

Selangor gets	5	representatives
Perak, P. W. and Penang ...	5	„
Negri Sembilan	3	„
Johore	2	„
Kedah	1	„
Kelantan	1	„
		„
Total	17	

Appendix III.

THE PLANTERS' ASSOCIATION OF MALAYA.

Form of Nomination under Rule 13.

We, the.....(District) Planters' Association, hereby nominate Mr.....of .....as a candidate for the Chair, Vice-Chair of the Planters' Association of Malaya.

Signature.....

Date,.....

I hereby testify my consent to be nominated a candidate for the Chair/Vice-Chair.

Signature.....

Mr. Kennedy says the main object of the draft rules is to secure fuller representation on the Standing Committee and to give that Committee more power in dealing with any business that comes

before it. He is aware that Mr. Harvey has spent a lot of time and a great deal of labour in drafting these rules. He thinks that members have perhaps not had sufficient time to consider the rules to say whether they should be adopted to-day, and it is for them to decide whether the rules should be passed or whether a committee should be appointed to scrutinize them and submit them for adoption at a subsequent meeting.

Mr. SHELTON-AGAR says the Central Perak Planters' Association had decided that this meeting be requested to agree to the election of a small sub-committee for the purpose of scrutinizing these draft rules. He says all Perak are agreed that the draft rules have been exceedingly well framed and that in principle they should be accepted. He thinks Mr. Harvey is to be heartily congratulated for having framed them, as they have nearly attained perfection. They meet almost every case and represent the whole opinion from Penang to Singapore. He thinks there are only a few small objections which could easily be overcome by altering, perhaps, loose phraseology. He instances one objection, which may be an accident, that the State of Perak is, in Appendix II, amalgamated with Province Wellesley and Penang. The point of view of Perak is that if this were allowed to pass Perak might lose its individuality. He points out that Perak produced more rubber last year than any one other of the Federated Malay States.

Mr. RITCHIE, on behalf of the Negri Sembilan Planters' Association, states that he is perfectly content with the rules drafted by Mr. Harvey with the exception of number 8 which provides that all members of Constituent Associations shall have the right to vote at annual general meetings of the Association. He says he is aware that this is one of the cardinal points in the constitution of the Planters' Association of Malaya but one of the objects in drafting the new rules is to ensure that the Association shall be a more representative body, and to that end a very admirable scheme of franchise based on acreage had been evolved. He thinks it would now be advisable to do away with the votes of members at annual general meetings and make the voting at such meetings to be on the basis of ordinary or delegate meetings, as the position seems to him to be anomalous. He points out it might very well happen that one affiliated Association might be keen on a particular subject and be able to send a considerable number of members who might out-vote members of other Associations. He suggests that the words "and vote" be deleted and the word "speak" be added in the rule under reference. He does not wish to force an amendment upon the meeting but hopes the sub-committee to be appointed to revise the rules will bear the point in mind.

Mr. HARVEY is opposed to the suggestion to take away from members at the annual meeting of the Association the right to vote. It was the only opportunity afforded to the rank and file members of having a direct voice in the management of the affairs of the Association. A similar rule had been adopted by the Planters' Association of Ceylon. He is convinced that the privilege is not likely to be abused and he does not consider the possibility instanced by Mr. Ritchie as one that is likely to occur.

He appreciates what Mr. Shelton-Agar says about the draft rules and is gratified to learn that they are in principle approved. It is a very difficult matter to frame rules to please everybody and he is conscious of the fact that the weak point lies in rule 18 but is confident that any differences and difficulties that exist can easily be settled by discussion. There is no reason why Perak should not stand alone. He refers to Pahang having been allotted no representative and says in the original draft Pahang was allotted one representative on the Standing Committee. He thinks that if Pahang want to have the right of representation on the Standing Committee they should increase their membership. If they allowed little organizations the right of representation, the governing body would become too large and too unwieldy. He says the Kajang District Planters' Association thinks that the Chairman of each Association or his representative should be a member of the Standing Committee. The great objection to this is that some of the best men in the country who may not be attached to any District Planters' Association will be left out. He thinks they ought to have the best men available on the Standing Committee. Another objection to which he would like to refer is that Kuala Lumpur is the centre of the Association. He thinks that Kuala Lumpur, as the capital of the Federation, should be the centre. Those who live in the north of Scotland and wish to see a boat race have to go to London as they could not possibly have a boat race on Loch Lomond. Those who want to shoot a policeman would have to go to Dublin as it is not permissible to shoot policemen in London.

Mr. KENNEDY asks Mr. Shelton-Agar to frame his suggestion in the form of a motion.

Mr. SHELTON-AGAR proposes that this meeting agrees to the principles of the draft rules and that it elect a special committee for the purposes of scrutinizing the draft rules, to hear objections and to amend same in accordance with the general desire. And in the event of the special committee approving of the new rules as then framed, that they be passed and come into force on being adopted by the next meeting of the Association.

MAJOR SLEE seconds the resolution which is carried *nem dis.*

Mr. HARVEY points out that any alteration to the rules of the Association can be passed only at the annual general meeting or at a special general meeting called for that purpose.

After some further discussion, the following special committee is elected:

Pahang	Viscount R. de Bondy
Kedah	Mr. E. D. Lane
Johore	„ C. Bradbery
Negri Sembilan	„ C. Ritchie
Perak	„ C. B. Graburn
Province Wellesley ...	„ F. Duncan Hindley
Selangor	„ Major C. Burn-Murdoch

and the Chairman and Vice-Chairman of the Planters' Association of Malaya.

Mr. SHELTON-AGAR proposes that this Committee be given power to co-opt other members as he thinks the Committee should not be deprived of the advice and counsel of men like Mr. Harvey.

Agreed to.

Mr. KENNEDY thinks it advisable that a circular should be sent out to District Planters' Associations advising them of the decision with regard to this matter and inviting them to send their views to any member of the Special Committee.

The SECRETARY is instructed accordingly.

6.—ELECTION OF FIVE MEMBERS OF STANDING COMMITTEE.

Mr. KENNEDY points out that if the rules of the Association are altered at the next meeting of the Association it will be necessary then to appoint another Standing Committee in the place of that which they are now called upon to elect.

Mr. SHELTON-AGAR suggests that the retiring Standing Committee be elected *en bloc* to carry on until the next meeting of the Association.

This is agreed to. The Standing Committee, therefore, consists of the following members:

Messrs. F. G. Harvey, Thos. H. Menzies, H. de H. Smith, R. Gooch, J. S. Ferguson, the Chairman of the Johore Planters' Association (Mr. C. Bradbery), and the present Chairman, Vice Chairman and Secretary of the Association *virtute officii*.

7.—SECRETARY AND TREASURER.

On the motion of Mr. F. Clyde Jeavons, seconded by Major Burn-Murdoch, Mr. C. Ward-Jackson is unanimously elected Secretary for the current year, and Mr. J. Fraser Brown, Treasurer.

8.—PLANTERS' BENEVOLENT FUND OF MALAYA.

The following ten gentlemen are nominated to serve on the Standing Committee of the corporation:

Revd. A. D. Harcus
The Hon, Mr. H. P. Clodd
Mr. C. Ritchie
„ D. H. Hampshire
„ A. B. Milne
„ R. M. Skinner
Mr. Thos. H. Menzies
„ J. S. Ferguson
The Chaplain of Selangor, and the Agent of the Chartered Bank of India, Australia and China, Kuala Lumpur

There being no other nominations,

Mr. KENNEDY declares the above duly elected and points out that the Standing Committee of the Benevolent Fund also consists of the Chairman of each Constituent Association and the Chairman and Secretary of the Planters' Association of Malaya *ex-officio*.

9.—BUDGET FOR 1920–21.

The CHAIRMAN tables the following budget for the current year:

Expenditure.		Revenue.	
To Publications, Printing and Stationery	$3,000 00	By Subscriptions at $2\frac{1}{2}$ cents per cultivated acre:	
„ Library	100.00	„ Bahau K. Pilah D.P.A. ...	$ 531.50
„ Premises	750.00	„ Batang Padang D.P.A. ...	515.55
„ Legal Advice ...	250.00	„ Batu Tiga D.P.A.	537.74
„ Standing Committee	1,200.00	„ Central Pahang P.A.	157.05
„ Secretary's Salary	5,400.00	„ Central Perak P.A.	899.67
„ Treasurer's „	600.00	„ Johore P.A. ...	2,154.60
„ Office Equipment and Furniture...	1,500.00	„ Kajang D.P.A....	616.04
„ Surplus	4.225.44	„ Kapar „ ...	584.27
		„ Kedah P.A. ...	1,035.02
		„ Kelantan P.A. ...	430.72
		„ Klang D.P.A. ...	613.48
		„ Kuala Langat D.P.A. ...	809.82
		„ Kuala Lumpur D.P.A. ...	829.26
		„ Kuala Selangor D.P.A. ...	999.07
		„ Lower Perak P.A.	1,212.94
		„ Malay Peninsula Agricultural Association ...	2,085.22
		„ Negri Sembilan P.A.	2,482.45
		„ Taiping D.P.A...	699.02
		„ Ulu Selangor D.P.A. ...	432.02
	$17,625.44		$17,625.44

On the motion of Mr. Ferguson, seconded by Mr. C. Bradbery, the budget as submitted is adopted, and the subscription for 1920-21 is assessed at $2\frac{1}{2}$ cents per cultivated acre.

10.—LABOUR.

(*a*) Exchange.

The Secretary submits the following correspondence :

Copy of cable from the Madura Co., Negapatam, dated 16th February, 1920, to Secretary, Planters' Association of Malaya, Kuala Lumpur.

" Please confirm that resolutions passed meeting twenty-eighth decided on rupees one hundred seventy-five as exchange compensation rate for coolies. Maduraco."

Copy of cable despatched by Secretary, P.A.M., on February 19th, 1920, to the Madura Co., Negapatam.

" Facts are as stated your cable sixteenth, P.A.M."

" Labour Office,
" Penang,
" No. 5 D.C.L. Pg. 87/20. " *1st April, 1920.*

" Sir,

" I have the honour to address you on the subject of the rate of exchange at which savings of kanganies and coolies on estates in the Straits Settlements and Federated Malay States are remitted to India.

" 2. The matter has again been discussed by the Indian Immigration Committee and it is understood that the Planters' Association of Malaya has advised employers in the Straits Settlements and Federated Malay States to allow such savings to be remitted to India at a preferential rate of exchange, but that employers are not bound by this advice.

" 3. The Superintendent of the Emigration Depôt at Negapatam has reported that there is a considerable variation in the rate of exchange in the instructions sent to India by employers of labour in the Federated Malay States and the Colony. The Superintendent considers it essential that he should be in a position to tell coolies admitted into the depôt at Negapatam exactly what are the conditions prevailing on estates before the coolies embark. Kanganies, who are at present informed by the Financial Agents of their cooly recruits, while mirasdars and other employers of labour in India are using the present rates of exchange to prevent would-be emigrants from leaving the country. It is difficult for the Superintendent to take any action unless something more definite and uniform is decided.

" 4. The Indian Immigration Committee is of opinion that the present uncertainty is likely to check emigration from India to these States at a time when it is most desirable that immigration should be encouraged in every possible manner. The committee considers the matter one of the greatest importance and requests me to suggest that a committee of some of the leading planters should be formed, on the invitation of your Association, to discuss the question with a view to action being taken to put the matter on a satisfactory footing.

"5. The Superintendent at Negapatam states that if he is to take any action correctly to inform coolies who arrive at the depôt, the preferential rate, if any, must be uniform for all estates. It is also suggested that all kangany recruiting licences should be endorsed so as to show exactly what if any preferential rate of exchange is allowed, together with any other conditions favourable to the cooly prevailing on the estate for which the kangany is recruiting.

"I have, etc.,
"(Sd.) OLIVER MARKS,
"*Acting Controller of Labour, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Mr. KENNEDY says:

It will be remembered that at our last meeting which was held in January a resolution was passed recommending all estates in Malaya employing Indian labour to compensate labourers in the matter of exchange at the rate of Rs. 175 for $100 on remitting their savings to India.

He regrets to say that the recommendation has failed to obtain unity of action on the part of employers, and as the question of labour generally is daily becoming more serious, it was considered not only advisable but imperative to bring up the question again at the meeting, with the object of endeavouring to obtain by some means or other that unity of action on the part of employers that is essential if we are successfully to combat the many rocks ahead of us in the serious problem of labour generally.

Since our meeting in January, we have had such information from India that goes to show that unless we wake up and do something, and that something quickly, we shall in all possibility be very badly "left" in the matter of recruiting labour from India. The question of exchange was discussed at a meeting of the Indian Immigration Committee held a few weeks ago, and it was decided to invite the Planters' Association of Malaya to select a committee with power to co-opt large employers of labour, or any others who would be useful on such a committee, and this is the proposal to consider now.

It has been suggested that in the first instance a fairly large committee be appointed for the purpose, not only of discussing the question of exchange but also of discussing the question of increasing wages or any other question that may effect the recruiting of labour from India, and that the first committee should consist of representatives from the following:

The Planters' Association of Malaya.
The Chairman of each District Planters' Association affiliated to the Planters' Association of Malaya.
The Malacca Planters' Association.
The Federated Malay States Railways.
The Public Works Department.
The Labour Department.
and representatives from the large estate agencies, and also proprietary planters.

Representatives from these bodies would, he thinks, be fully representative of all important employers of Indian labour throughout the country, and it is hoped in this way to obtain unity of action by employers in whatever measures the committee may think necessary in the interests of recruiting.

It has also been suggested that such a committee should first discuss the all important questions affecting recruiting, and having done so, that an executive committee be appointed from this committee to draw up such schemes or recommendations as it may deem advisable.

That the situation is a serious one must be plain to all thinking people, and if evidence were required as to the extent of that seriousness, we have only to refer to advices lately received from India. He presumes that most present have read the circular lately issued by the Madura Co. to estates in this country and that circular makes it quite plain that some united action in the matter is imperative, if we are to get even approximately the number of coolies we require. He received a few weeks ago in addition to the circular mentioned, a private letter from the representatives of the Madura Co. urging the necessity for united action. The following extracts from that letter are interesting:

> "I do not know what the actual feeling is on your side; but, judging from the small number of advices addressed to us, I am afraid most estates are disposed to follow the Asquithian motto 'wait and see.'
>
> "At the risk of boring you, however, I must reiterate that, in our humble opinion, the position is one requiring the most urgent attention, if the Straits Settlements and Federated Malay States are going to depend on India for the approximate number of coolies indicated as necessary, to meet your increasing demands for cheap labour.
>
> "Much valuable time has already been lost, as the large number of coolies returned to India this year with savings converted at the current rates of exchange, constitute so much advertisement matter run to waste.
>
> "I am, however, still hopeful that a good deal of the harm done can be neutralized by an energetic advertising campaign; but one of the essential requirements of such a compaign is that the financial agents on this side be authorized by estates to issue pamphlets confirming the rate of exchange for the future at Rs. 175 per 100 dollars.
>
> "If nothing is done, I estimate an appreciable drop in 1920 on last year's emigrant figures."

He says when he was in Penang a few days ago he called on the Controller of Labour and he very courteously discussed this matter with him. He had just received a letter from the Emigrant Agent, Straits Settlements and Federated Malay States in India, and he kindly gave him permission to quote to this meeting the following extracts from that letter:

> "I have heard lately that the relations of coolies in Malaya have been dissuaded from emigrating on the grounds (*a*) that there is a shortage of rice in the Federated Malay States (*b*) that wages are insufficient and (*c*) that the dollar is only worth a rupee for remittance purposes.

"If more coolies are required during 1920 than emigrated from this country in 1919 (or even as many) I think that the general rate of wages in Malaya should be raised. I have not heard of any general increase in the wages paid to labourers to meet the increased cost of living; a concession rate for the purchase of rice seems to be granted on certain estates, but as that rate is about double the pre-war rate the coolies do not benefit much by it."

The Superintendent, Emigration Depôt, Negapatam, writes:

"Even during the short time I have been here I have had several complaints from kanganies in the rate of exchange as well as the high prices prevailing in Malaya, and that they find difficulty in recruiting labour. Dr. Foston also says he agrees with the remarks of the Emigrant Agent, Madras."

The Controller of Labour also kindly gave him the recruiting figures up to the 22nd of this month for the present year, and the figures for the corresponding period of 1919, which are:

Immigration to Malaya.	Adults.	Minors.
Up to 22/4/20 ...	12,689 ...	1,680
Up to 23/4/19 ...	11,821 ...	722

From these figures it will be seen that 868 more adults and 958 more minors have been recruited during this year for the period mentioned.

These figures, no doubt, look well on paper, but we have to remember that during the first quarter of 1919 the Madras Depôt was closed to all recruiting, whilst it has been opened during the whole of the present year to date, therefore, our recruiting figures to date for this year do not actually compare favourably with those for the corresponding period of 1919.

He would like to add that Mr. Davies, the Recruiting Financial Agent in India for the Malay Peninsula Agricultural Association, arrived here from India a few days ago in order that he might go into questions affecting recruiting with the committee of that Association, and he kindly consented to attend this meeting to-day and he feels sure all will be interested to hear what Mr. Davies has to say on this very important matter.

In conclusion, he would like to say that the question at issue is probably the most serious and critical that we have ever had to deal with. The prosperity of our agricultural industries depends upon a sufficiency of labour. During the past year or so, new elements, such as exchange and high cost of living have arisen, also, we have in India new and keen competitors in the labour camp, therefore it is now up to us to review the whole situation anew and by united action take such practical measures as may be necessary to ensure a steady flow of labour into the country.

He asks all members not to turn aside lightly the suggestion of the Indian Immigration Committee but to act upon it, and in doing so, he is sure they will be doing a good service to the industry they represent.

Mr. KENNEDY invites Mr. Davies to address the meeting.

Mr. DAVIES says on his way out from home recently he stopped in Madras, where he was requested by the Malay Peninsula Agricultural Association to find out, as far as possible, the conditions there and the present state of immigration from India, and what particular effect the exchange would have on future immigration. He had come to certain conclusions without the views of any Government or other agents who were connected with the matter of recruiting labour to Malaya. He was asked certain specific questions by the Malay Peninsula Agricultural Association to which he had sent in certain definite answers. In addition to what he was asked to draw up a report of the conditions in general as they appeared to him, he drew up a report which was entirely from the point of view of emigration from India, and not from the point of view of those in Malaya. Among the specific questions he was asked were these: (1) To what extent the cost of living in different parts of India had gone up since 1915, to which he had replied that he would put down the increase to anything from 150 to 300 per cent; (2) What effect on the cost of living in India the depreciation of Straits dollar has, and his answer was that there was no effect; (3) What effect the lower recruiting value of the Straits dollar would have in the future, and he replied that it would be bad; (4) Whether there was very much competition from other countries like Ceylon, to which his opinion was in the affirmative; (5) What was thought advisable to do in the future, and his opinion was either an increase in wages or concession on remittances to India. Those were the points on which he had been asked to give definite answers.

Later no, on instructions from the committee of the Malay Peninsula Agricultural Association he submitted a report going into further details, which he had been able to gather during the short time at his disposal. In his report he stated as follows:

"In accordance with the instructions of the committee of the Malay Peninsula Agricultural Association, I submit a report on the conditions which at the short time at my disposal, I have been able to ascertain, affect the present state of emigration from India to this country.

I will deal with the subject under separate headings and add my suggestion as to the way in which emigration from India might be encouraged.

I attribute the present decrease in emigration to the following points:

1. The high cost of living in Malaya, and secondly in India.
2. Local competition for labour in India and the consequent rise in wages over there.
3. The present rates of pay in India in comparison with the rates of pay in Malaya, quite apart from any question of exchange.
4. The current rate of exchange being adverse to the class of coolie who emigrates with the intention of remitting money to India.
5. The propaganda that is being spread about in other Colonies about the depreciation (from the Indian point of view) of the dollar.

It appears that with the exception of rice, the increased cost of living in Malaya has to be borne by the coolie on his old rate of pay, although the cost of living has increased to him by not less than 100 per cent. and in many cases greatly in excess of that figure. Even rice at concession rates costs him about 25 per cent. more than in pre-war days.

In India, the increased cost of living varies, as it presumably does over here, to between 150 per cent. and 300 per cent. on pre-war rates, but in India the rates of pay have been raised to more or less correspond with the increased cost of living.

This competition is entirely financial for it appears that, for the present landowners are in a position to pay at rates which are not less, and may possibly be more attractive to the coolie, than the recognized rate of pay in Malaya.

Crops have been good and I am informed that just now coolies can earn 12 and 14 annas a day working ground nuts, and that a man can get 10 annas a day in most parts of the country, a rate that obviously is far in excess of the average rate of pay of 40 cents in this country.

Estates in India also appear to have raised their pay rates all round, and a minimum rate of six annas per diem is easily to be obtained, as it also is on ordinary land work.

It will be seen by the preceding paragraph that the rates in India appear to have reached the same proportion of a rupee that the 40 cents paid here bears to the dollar, and as the rupee has about the same purchasing power in India as the dollar has in Malaya the coolie is as well off in India to-day, perhaps better off, as he would be in this country. And in this connection it must not be forgotten that the coolie in India has not an expensive sea voyage to pay for before he can get to his home.

The former rate of exchange was undoubtedly a great inducement to emigrate to those men who meant to make and save dollars in order to remit them to their homes at the rate of Rs. 175 per $100. The present rate is bound to deter these men from emigrating and also a large number of coolies who were attracted by the idea of getting more by exchange than they appeared to have earned, although the latter class perhaps rarely made remittances.

Even the concession in exchange made by some estates to the coolies cannot attract labour very much as the high cost of living precludes them from taking advantage of it, and this is now well known and realized in India.

There is considerable activity in India just now to encourage emigration to Ceylon, to obtain labour for estates in India, and by the landowners to retain the labourers in their own districts. In addition to the increased rates of pay in India, the adverse rate of exchange against Malaya is also widely advertised, and it is quite conceivable that his propaganda is harmful to emigration to this country.

And what is now serious is the fact, according to a very good authority, that coolies over here are writing to their friends and relations in India informing them of the prevailing conditions and advising them against emigrating to Malaya, and doubtless coolies returning to India are doing the same thing by word of mouth.

Mr. KENNEDY is sure the Association is very much indebted to Mr. Davies for attending and for giving this valuable information.

Mr. DUNCAN says Mr. Kennedy has told them all there was to say on the matter, and it is important that they should come to a decision without unnecessary delay. He has no doubt that all of them realize that the situation is likely to become more acute unless something is done to counteract it. As a member of the Immigration Committee he was one of those responsible for making the suggestion that the matter should be dealt with by a committee to be appointed at this meeting. He thinks before they can get unity of action they must get unity of opinion, and the only way to get unity of opinion is to appoint a committee representative of all the interests in British Malaya, and come to a decision quickly at least by the middle of June. His suggestion is that the meeting should appoint a committee of three or five men who would co-opt others representative of all interests and even of Government departments such as the Public Works Department. The first meeting of this committee should be held as quickly as possible. They must decide on the procedure to be adopted and the whole committee should appoint an executive committee to secure all the information necessary and draw up a sort of scheme. This scheme would be considered by the larger committee and then the scheme would be presented to the next special general meeting of the Planters' Association of Malaya. Even after a decision had been arrived at, he thinks it advisable to keep this committee going, because in the future, different questions connected with labour would crop up which would require constant consideration at the hands of the committee. Labour conditions were changing so rapidly that any decision arrived at to-day might not be applicable to-morrow. He, therefore, proposes that a committee consisting of five members of the Planters' Association of Malaya be appointed to consider and advice upon labour matters within the Peninsula.

That such committee be styled the Organising Committee and be empowered to co-opt all Chairmen of Constituent Associations and such other individuals, including representatives of Agency firms and Heads of Government Departments employing labour on a large scale, as they think fit.

The larger Committee thus constituted to be styled the General Labour Committee, British Malaya.

Mr. HARVEY says the Planters' Association of Malaya has done everything it could with regard to that question of concessions to their labour on exchange. The Planters' Association of Malaya could not force anybody to take up a certain line of action but they have recommended to them what should be done. The rationing of rice in Malaya had a very serious effect on recruiting and he has no doubt that it had a very bad effect in India. The rice question was in such a state that there is a very little hope of remedying it in the near future. There was one other point which might perhaps be lost sight of, and that is that most of the old estates are getting tired of recruiting labour. He knew of a certain place which recruited 300 coolies during 1919 but only 30 of them are left. That is the experience of many people, and that is a question which might be seriously considered. He could not help thinking that in a matter like this there should be some agreement between planters in the country by which they should agree not to take coolies who come to them without discharge notes from their

previous employers. His penacea for some of the evils connected with the matter is alternate day tapping. They then would have time to look about and put their house in order. The trouble would not stop where it is when the very large areas now being cleared are opened up. Then there would be further trouble. There is great scope for a labour federation in the country and if that could be brought about they would be able to weather the storm which is looming ahead.

Mr. RITCHIE enquires whether the committee will deal only with matters affecting Indian labourers.

Mr. DUNCAN replies that matters affecting other nationalities will also be considered.

Mr. REEVE-TUCKER thinks that employers of labour on mines should be represented upon the committee.

Mr. JEAVONS seconds Mr. Duncan's proposal for the appointment of a committee and says he has discussed the labour question recently with an officer of the Public Works Department, who informed him that the reason why his department did not recruit its own labour was because it desires to save public money.

Mr. O'HARA HICKSON calls attention to the fact that the amounts which coolies are allowed to remit to India at the preferential rate of exchange vary from 10 to 40 per cent., and sometimes this is calculated on the balance of a pay due to the coolies at the end of the month and sometimes on the net earnings of coolies. He thinks the maximum amount on which the concession is granted should be fixed.

He refers to the Public Works Department and reminds the Association that one of its members went into figures some two or three years ago and found that 90 per cent. of the coolies employed by the Public Works Department were recruited locally.

Mr. SHELTON-AGAR says the question of remittances was discussed by the Central Perak Planters' Association and they came to the conclusion that they should allow $3 per head to be paid back over the pay table on pay-day by the coolies. When that amount had accumulated for six months the total sum would be remitted to India at the rate of Rs. 175 for $100. That suggestion had a good deal to commend it. With regard to recruiting, he is afraid that the position would not improve very much until the Immigration Committee decided to allow a very much larger and a more remunerative scale for those who recruited labour from India. He wishes to mention, for the consideration of the committee which Mr. Duncan had proposed, that $50 per head should be paid. The reason why they were getting tired of recruiting was because they had spent so much of their money for somebody else's benefit.

Mr. DUNCAN says had the assessment not been raised from the old rate of $2.50, the reserve funds of the Immigration Committee amounting at the end of March, 1920, to over a million dollars, would by the end of the year have been reduced to about $150,000. If they wanted to get more than $10 they would have to raise the assessment to a much larger figure.

Mr. DUNCAN's proposal is then put to the meeting and carried, and the under-mentioned five members are elected to serve on the committee and are given power to co-opt others—namely, Messrs. J. W. Kennedy, J. Bruce, W. Duncan, A. B. Milne and Thos. H. Menzies.

(*b*) Labour Code.

The Secretary submits the following correspondence:

"Kuala Lumpur,
"Federated Malay States,
"No. 6418/19. "*26th February, 1920.*

"Sir,

"I am directed to forward copy of a form which it is proposed, on the recommendation of the Indian Immigration Committee, to substitute for that prescribed by the third schedule to the Labour Code for returns under section 66 of that Code.

"2. The committee, in recommending the adoption of this new form, expressed the opinion that the existing form was unsatisfactory for the purpose of obtaining accurate or useful information. It is proposed that a separate copy of the new form, if adopted, should be filled in and signed for each labourer registered—man, woman, or child.

"3. The Chief Secretary will be glad of an expression of the views of the Association as to the adoption of the proposed new form.

"I have, etc.,
"(Sd.) T. P. Coe,
"*for Ag. Under Secretary, F.M.S.*

"The Secretary,
"Planters' Association of Malaya,
"Kuala Lumpur."

Registration No.

THE LABOUR CODE, 1912.

The Third Schedule.

(Section 66.)

Registration of Locally engaged Indian Labourer.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Date of engagement.	Place of employment.	Name of employer.	Name of labourer.	Father's name.	Sex.	Age.	Caste.	Distinguishing marks.	Name of last employer and place of last employment.	Date of leaving.	Whether previously employed on place of present employment.	Length of residence in the Colony or in any of the States of the Malay Peninsula under British protection.	Remarks.

I certify that the particulars contained in the foregoing statement are correct.

Date..... Signature of employer.

Mr. HARRISON enquires why the change was considered necessary.

Mr. HARVEY in reply states that on the existing form it is possible to fill in as many names as space permits and to pay one dollar for the lot. The proposed new form provides for the name of only one cooly to be entered upon it and for each coolie the registration fee is to be one dollar. He thinks the new form is in every way better than the old one and submits that the information contained in it will be of great help to employers in ascertaining where coolies go in the event of their absconding.

Mr. FERGUSON suggests that the thumb imprint of each cooly so registered be impressed in the remarks column.

Mr. HARRISON seconds Mr. Ferguson's proposal, which is agreed to.

Mr. HARRISON proposes that the Secretary be instructed to communicate with the Under Secretary suggesting that the Labour Code be altered so as to empower the Controller of Labour to collect the one dollar fees for the registration of locally recruited coolies.

Mr. FERGUSON suggests that the onus rests upon the employer and not upon the Controller of Labour.

Mr. O'HARA HICKSON seconds Mr. Harrison's proposal which is agreed to.

The SECRETARY submits the following resolutions:

RESOLUTION FROM THE LOWER PERAK PLANTERS' ASSOCIATION.

"That the Secretaries be instructed to request the Planters' Association of Malaya to include in their next agenda the question of revising the Labour Code so as to include all Malabar coolies as 'Indian Labourers' (Section 150) also that (section 40) place of employment be altered to read 'all and any employers of even one' Indian labourer."

RESOLUTION FROM THE CENTRAL PERAK PLANTERS' ASSOCIATION.

"That section 40 of the Labour Code place of employment be altered to read 'all and any employers of even one' Indian labourer."

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Mr. KENNEDY explains that in the ordinary course of events Malabar coolies come under the Labour Code. Malabar is in the Madras Presidency. In that neighbourhood, however, there is a Native State, Cochin, the natives of which are Malayalese. It might be that if a cooly could prove he was a native of the latter State he could not be prosecuted under the Labour Code.

Mr. BRUCE remarks that there will always be a right of action against such a cooly for any offence under the Civil Code.

Mr. GRAY says the question arose owing to a recent judgment by a magistrate who held that a certain Malabar cooly who had been arrested and brought before him for absconding could not be punished under the Labour Code.

Mr. GRABURN speaks as a Second Class Magistrate and says he had written for instructions upon the matter and was informed that Malayalees were to be treated as Indian labourers and as such were liable to arrest. The onus of proving that he does not belong to the Madras Presidency lays with the cooly.

Mr. SHELTON-AGAR says, with reference to the resolution forwarded by the Central Perak Planters' Associations, this matter was brought up before his Association, and they thought it was one which they should press upon Government. He does not want to propose any hasty resolution at that meeting but he thinks it might be dealt with by the Standing Committee. Hitherto assessment has been collected only on people employing over 10 coolies. Those employing less had escaped scot-free. The general argument put forward was that it was difficult, and even almost impossible, to collect this assessment. The difficulties were not so great as they were imagined. Small kampongs, as they all know, had to pay their annual land assessment every year, and this assessment on coolies could be collected at the same time as the land assessment. The number of small native kampongs in the country amounted to a very considerable acreage. Roughly speaking, he would put it at 300,000. If they calculated at the rate of a coolie for every five such planted acres, this acreage would require at least 60,000 coolies. This area was increasing yearly and although the labourers on these kampongs were not all Indians, still there should be an appreciably large number of Indian labourers. Coolies on estates which adjoined such kampongs left the estates and the next day they would find those coolies on the adjoining kampong receiving handsome wages.

Mr. KENNEDY says he had also been under the same impression as Mr. Shelton-Agar that native holdings employing less than 10 coolies escaped assessment, but this is not so, and he had since ascertained that holdings employing even one coolie are liable for assessment.

Mr. FERGUSON understands employers are not liable for assessment on coolies who do not reside on their estates.

After some discussion it is agreed to leave the matter to be dealt with by the Standing Committee.

(*c*) LABOUR CLAUSE IN NEW LAND GRANTS.

The SECRETARY submits the following letter:

"KUALA LUMPUR,
"FEDERATED MALAY STATES,
"No. 5319/19. "*15th March, 1920.*

"SIR,

"In further reply to your letter of the 3rd September, 1919, forwarding copy of a resolution relating to the insertion of a labour clause in new land grants, which was passed at an ordinary meeting of your Association on the 28th April, 1919, I am directed to inform

you that with regard to the first part of the resolution, the British Residents of the Federated Malay States will endeavour to see that applicants for new land are in a position to recruit labour from abroad; and with regard to the second part to say that Government accepts the suggestion which has in some cases been acted upon in the past.

"2. I am to add that it is not considered necessary to apply this suggestion to areas which do not exceed 100 acres.

"I have, etc.,
"(Sd.) T. S. ADAMS,
"*for Ag. Under Secretary, F.M.S.*"

Mr. KENNEDY says this matter was considered by the Standing Committee some six months ago when nearly a whole day was spent over it. They then encountered almost insuperable difficulties and found that nothing could be done beyond asking the Government to do what they had undertaken in the letter under reference. He does not think Government is prepared to introduce legislation for the time being.

Mr. FERGUSON believes that when the matter was brought before the Planters' Association of Malaya last time it was during the war and submits that conditions have altered materially since then. Large tracts of land were about to be opened up and he thinks it is time something more definite than that promised in the letter were done. The least they could do is to ask the Government to legislate and they should not be satisfied with anything less than legislation. Even if a labour clause were inserted in all grants of 500 acres or over he does not think it would in any way check private enterprise.

Mr. SHELTON-AGAR supports Mr. Ferguson. He says the present position is definitely bad and refers to what he had heard that 50,000 acres are being opened up in one State and 10,000 in another, and so on. All these large areas require labour for development. Under the previous findings of the Standing Committee it was thought unwise to invoke the aid of the Government to bring about legislation for the insertion of a labour clause in land grants. He submits that conditions have changed since that decision was arrived at and urges the Standing Committee to take up the matter with the Government once more.

Mr. KENNEDY is sure that the Standing Committee will be prepared to consider the matter again if it is so desired.

Mr. HARVEY expresses the opinion that the matter should be allowed to remain where it is. He thinks the reply from the Government is satisfactory and states there is very little difference between the circumstances and condition obtaining at the time the Standing Committee considered the matter and now. Further he thinks there are matters more urgent and pressing before the Standing Committee than this and suggests that it be allowed to rest. He assures the meeting that the large areas referred to by Mr. Shelton-Agar will be carefully watched by Government and is confident that the Government is fully alive to the seriousness of the labour question.

Mr. Shelton-Agar urges that the views of the Government in the matter are no doubt very different from those of the planting community. The Government welcomes opening up of land in any place and to any extent because that means more revenue. He thinks that Government does not care very much whether labour is recruited by those taking up large areas or not, while those who have established labour forces which had taken years to build, strongly object to their labourers being taken away.

Mr. Carter agrees with Mr. Shelton-Agar.

Mr. Duncan suggests that the previous speakers are arguing on the assumption that new planting concerns are not going to recruit any labour from other countries, whereas in all probability they will do so.

Mr. Carter submits it will be no use closing the stable door after the horse has gone.

Mr. Graburn enquires whether the Standing Committee would have to go over all the ground previously covered by them when taking up the question again. He calls attention to the fact that big contracts are now being undertaken by the Government and instances that of building the Johore causeway. Government is getting labour somewhere, and it is certain that that labour is largely locally recruited. He thinks Government should be penalised in the same way as it was suggested to penalise concerns opening up large tracts of land.

Mr. Harvey again suggests that the matter be allowed to rest where it is for the time being.

Mr. Duncan agrees with Mr. Harvey.

Mr. Kennedy suggests that Mr. Shelton-Agar should agree to allow the matter to be considered by the committee which is to enquire into the whole question of labour.

Mr Shelton-Agar signifies his agreement.

(*d*) Visitors to India.

The Secretary submits the following correspondence and states that the following gentlemen have been nominated to make the suggested trip to India:

Klang D. P. A.—R. Napier Hendrie, E. N. W. Oliver and H. P. Hardingham

Negri Sembilan P. A.—W. W. Forrest

Lower Perak P. A.—M. R. Hartley

Kedah P. A.—E. S. Jorgenson

Kapar D. P. A.—H. R. Jones and H. Case

Kuala Langat D. P. A.—A. H. Malet and H. O. Kennedy

Ulu Selangor D. P. A.—R. M. Newton and M. D. Fallon

"LABOUR OFFICE,
"PENANG,
"No. 9 in C. of L. 485/19. "*24th February, 1920.*

"SIR,

"As there appears to be a certain amount of misunderstanding regarding the proposal submitted to you in my letter of November 20th last, I would ask you to inform your Association that the names of proposed visitors should be sent to me in time for them to be submitted to Government and to enable me to communicate with them with regard to the details of the inspection required.

"I have, etc.,
"(Sd.) E. W. F. GILMAN,
"*Acting Controller of Labour, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

—/—

(*e*) GENERAL.

The SECRETARY submits the following correspondence :

"LABOUR OFFICE,
"PENANG,
"No. 3 in C. of L. 146/20. "*6th April, 1920.*

"SIR,

"I have the honour to inform you that sanction has been granted for the treatment of maternity cases of the families of labourers free of cost where accommodation is available in district and general hospitals in the Federated Malay States.

"2. I would request that you would be good enough to bring this to the notice of the members of your Association so that they can take steps to inform those who are most interested in the decision.

"I have, etc.,
"(Sd.) OLIVER MARKS,
"*Acting Controller of Labour, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

—

"LABOUR OFFICE,
"PENANG,
"No. 5 in C. of L. 127/20. "*7th April, 1920.*

"SIR,

"I have the honour to invite reference to the minutes to the meeting of the Planters' Association of Malaya held on 28th January, 1920, regarding the case of dependents of coolies on estates and the frequency of deaths from drowning of children in unprotected estate wells and drains.

"2. Since the date of that meeting four more cases have been reported to this office. Two of estate children drowned in wells and two in open drains. The inquests on these cases showed that the deaths of these children were all avoidable.

"3. As you are aware legislation is being prepared to provide for the care of labourers' dependents, but some cosiderable time must elapse before it can become law and action can be taken under it. I would therefore most earnestly urge your Association to take action with a view to preventing this loss of child life on estates which is fast becoming a scandal.

"I have, etc.,
"(Sd.) OLIVER MARKS,
"*Acting Controller of Labour, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Mr. KENNEDY refers to the question of care of labourers' dependents and urges members of the Association to do all in their power pending the introduction of legislation which is being prepared.

The SECRETARY submits the following correspondence :

"LABOUR OFFICE,
"KUALA LUMPUR,
"*15th April, 1920.*

"SIR,

"I have the honour to forward for your information a copy of a memorandum regarding recruiting licences received by me from the Assistant Controller of Labour, Penang.

"I have, etc.,
"(Sd.) B. F. BRIDGE,
"*Assistant Controller of Labour,*
"*Kuala Lumpur.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Extracts from Assistant Controller of Labour, Penang's Memo. dated 9th April, 1920.

"I do not normally register licences of men who have been less than three months on an estate, unless there is some special reason for doing so, and I should be glad if you would let employers understand this. The reasons and necessity for this are obvious. (*a*) It is essential that an employer should be well acquainted with the character and reliability of the men he is sending to recruit, for only the best men must be selected. He cannot know his man under three months' trial. (*b*) It is equally important that the man have

a definite interest in the estate and a strong connection with it. He must be thoroughly conversant with all conditions on the estate so that he can advertise it in India. He cannot do this under three months. Kanganies arrive here who hardly know the name of the estate they are recruiting for—neither Tamil nor English name. (*c*) A man who has only been on the estate a month or so may very possibly have absconded from his previous estate (my enquiries have frequently elicited this fact) and he is quite likely to do it again—this time taking with him the coolies he has recruited. Even if he has a discharge ticket from one estate, that is no recommendation for his being employed immediately as a recruiter on another. He should be given time to get a definite interest in and connection with the estate before being given the important work of recruiting, and I regard three months as the minimum of time necessary for this. The offenders are usually new estates who do not know much about recruiting and I should be glad if you would let employers understand the necessity of this rule as opportunity occurs."

(Sd.) R. Boyd.

"Ulu Selangor District Planters' Association.
"Katoyang Estate,
"Tanjong Malim,
"*6th December, 1919.*

"Sir,

"I am instructed to request favour of your opinion on the following point regarding the employment of local labour:

(*a*) As to whether it is incumbent upon owners of native holdings, who employ labour from European estates either on Sundays or on cash-work in the afternoon, to report such labour as having been locally engaged?

(*b*) As to whether in circumstances as detailed above owners of native holdings are liable for payment of assessment to the Tamil Immigration Fund?

"I have, etc.,
"(Sd.) L. W. Tivy,
"*Hon. Secretary,*
"*Ulu Selangor District Planters' Association.*

"The Controller of Labour,
"S. S. and F. M. S.,
"Kuala Lumpur."

"Labour Office,
"Penang,
"*3rd January, 1920.*

"Sir,

"In reply to your letter of 6th December, 1919, I have the honour to inform you that it does not appear to me to be incumbent upon owners of native holdings, who employ labour from European estates either on Sundays or on cash-work in the afternoon, to report such labour as having been locally engaged.

"2. The owners of native holdings employing labour in the manner described are in my opinion liable to pay assessment to the Immigration Fund on such labour.

"I have, etc.,
"(Sd.) E. W. F. GILMAN,
"*Acting Controller of Labour, F.M.S.*

"THE HON. SECRETARY,
"ULU SELANGOR DISTRICT PLANTERS' ASSOCIATION."

11.—FOOD.

The SECRETARY submits the following correspondence:

"KUALA LUMPUR,
"*1st March, 1920.*

"Sir,

"With further reference to your letter No. 2 in 11/20, dated 20th January last, I have the honour to enquire whether the Government is prepared to give any guarantee that a sufficient supply of imported and locally grown foodstuffs will be forthcoming for those estates which avail themselves of the alternative to reduce their labourers' rice ration by one-third and to supply other food as a substitute.

"I have, etc.,
"(Sd.) C. WARD-JACKSON,
"*Secretary.*

"THE DIRECTOR OF FOOD PRODUCTION, F.M.S.,
"KUALA LUMPUR."

"OFFICE OF THE DIRECTOR OF FOOD PRODUCTION,
"F.M.S. AND S.S.
"KUALA LUMPUR,
"*3rd March, 1920.*

"No. 14 in 11/20.

"SIR,

"I have the honour to acknowledge the receipt of your letter of the 1st instant on the subject of the substitution of other food for a proportion of the rice ration of estate labourers.

"2. While it is not possible to give an absolute guarantee as to the amount of other foodstuffs that will be available at some future time, you may rest assured that the reduction of the present rice

ration by one-third will not be enforced if it can be shown that other foodstuffs that might be used as a partial substitute are not obtainable.

"3. In this connection I would invite your attention to paragraph 7 of my letter of the 20th January in which I urged the importance of compliance by estate managers with the request for information as to their estimated monthly requirements of imported foodstuffs. The number of replies hitherto received by District Officers has been disappointingly small.

"I have, etc.,

"(Sd.) E. S. Hose,

"*Director of Food Production,*

"*F.M.S. and S.S.*

"The Secretary,

"Planters' Association of Malaya,

"Kuala Lumpur."

"Kuala Lumpur,

"*15th March, 1920.*

"Sir,

"With further reference to your letter No. 2 in 11/20 of 20th January and that dated the 3rd inst., No. 14 in 11/20, I have the honour to enquire whether it is the intention of the Government to reduce labourers' rice ration by one-third irrespective of whether estates grow foodstuffs or not.

"I have, etc.,

"(Sd.) C. Ward-Jackson,

"*Secretary.*

"The Director of Food Production, F.M.S.,

"Kuala Lumpur."

"Office of the Director of Food Production,

"F.M.S. and S.S.,

"Kuala Lumpur,

"*16th March, 1920.*

"No. 16 in 11/20.

"Sir,

"I have the honour to acknowledge the receipt of your letter dated 15th March, 1920.

"2. The rice ration of estates which plant foodstuffs will not be reduced.

"3. The rice ration of estates which do not plant foodstuffs will be reduced.

"4 The anticipation is that owing to the high price of rice, estates which have planted foodstuffs will automatically reduce their demands for rice and issue the foodstuffs which they have grown, to their labourers.

"5. Estates which have not planted foodstuffs will have to purchase substitutes: only if no substitute should be available, they will be allowed to purchase rice if that is available.

"I have, etc.,
"(Sd.) F. W. Douglas,
"*Director of Food Production,*
"*F.M.S. and S.S.*

"The Secretary,
"Planters' Association of Malaya,
"Kuala Lumpur."

"Office of the Director of Food Production,
"F.M.S. & S.S.,
"Kuala Lumpur,
"*10th April, 1920.*

"No. 8 in 227/19.

"Sir,

"I have the honour to inform you that all the 'wet' padi seed provided by the Agricultural Department is of one variety—i.e., Radiu Kuning and is of six months maturation period.

"It is most suitable for soft soil.

"2. The wet padi seed is being stored in Kuala Lumpur and the dry padi at Klang, so as to avoid the confusion which occurred last year where planters were sold wet and dry padi indiscriminately.

"3. This type of wet padi did exceedingly well in Lower Perak, and would therefore probably do well in the coast districts of Selangor and Malacca.

"I have, etc.,
"(Sd.) F. W. Douglas,
"*Acting Director of Food Production,*
"*F.M.S. and S.S.*

"The Secretary,
"Malayan Planters' Association,
"Kuala Lumpur."

"OFFICE OF THE DIRECTOR OF FOOD PRODUCTION,
"F.M.S. AND S.S.,
"KUALA LUMPUR,
"*27th April, 1920.*

"No. 3 in S.S. 38/20.

"SIR,

"I have the honour to inform you that I have received samples of dried tapioca and a mixture of dried flour and tapioca from the Secretary, Malacca Planters' Association.

"2. The tapioca alone costs $11 per pikul and the mixture $14 per pikul and they say the Chinese coolies there like it as a rice substitute.

"3. Some of your members may like to try this substitute as the price is not so very high.

"I have, etc.,
"(Sd.) F. W. DOUGLAS,
"*Acting Director of Food Production,*
"*F.M.S. and S.S.*

"THE SECRETARY,
"MALAYAN PLANTERS' ASSOCIATION,
"KUALA LUMPUR."

"OFFICE OF THE DIRECTOR OF FOOD PRODUCTION,
"F.M.S. & S.S.,
"KUALA LUMPUR,
"*28th April, 1920.*

"No. 4 in 42/20.

"SIR,

"I send you herewith some notes by Mr. Burkley, the District Officer, Upper Perak, on his experiments with dry padi planting.

"2. It seems as if he was proving that regular dry padi crops can be grown particularly if a rotation were adopted.

"I have, etc.,
"(Sd.) F. W. DOUGLAS,
"*Acting Director of Food Production,*
"*F.M.S. and S.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"For the second year in succession we tried growing two crops of ladang padi. In May 10 acres of good land was planted with padi Malacca—one of the so-called 100 day padis. This was harvested in August, the straw at once burned off, and the land planted with padi Jitang which ripened in January, 1920.

"Both crops were excellent, but I cannot give figures as pigs got it, and sparrows attacked the first crop unmercifully. I suppose for being out of season.

"Another experiment on two acres of stiff clay from which I took a crop of padi in January. I at once cultivated and gave it a good dressing of cattle manure and planted millet and jelai. Again without any break at all after harvest, I cultivated and manured it again and now have a grand crop of padi on it again.

"Another experiment was alternating padi and millet, ubis, and then padi and jelai without any break or rest to the soil, with good results. It all goes to prove that hill padi can be cultivated in this country as wheat, barley, or oats in cooler climates, where manure is available. A crop of ubis would give the soil a year's rest."

Mr. LANE says recently while he was on a visit to Sumatra he saw a tongkang loaded with 500 bags of rice. When he enquired where the rice came from he was told that it came from Saigon. Personally he thought it came from Singapore. In another port he saw 1,500 bags of rice which they had no hesitation in saying had come from Singapore. He asked the towkay whether he would get him some rice and he told him that he could get rice on any day of the week in Singapore. Between Penang and Singapore there were six or seven small ports on the Sumatra Coast and he was sure that thousands of bags of rice found their way to each one of them. If the meeting was of the same opinion as he, then he would propose that the Association should call the attention of the Government to the present state of affairs, as he is sure that rice is smuggled from Singapore.

Mr. KENNEDY asks whether Mr. Lane is in possession of any conclusive evidence which will justify the Association in addressing the Food Controller on the matter.

Mr. LANE says he has the evidence of his own eyes and that those in charge of the rice made no secret at all of where it had been obtained.

Mr. HINDLEY substantiates in part Mr. Lane's statements and says estates in Sumatra have abundance of rice which he is informed is obtained from Singapore. The gentleman who gave him this information would no doubt respond to an invitation to tell all he knew.

Mr. HARVEY says from what he knows about the Food Controller in Singapore he is sure that gentleman would be glad to have information of this nature even though the evidence is perhaps very slight.

Mr. DUNCAN suggests that the Secretary be instructed to write to the Food Controller on the matter.

The Secretary is instructed accordingly.

Mr. CARTER refers to the letters from the Director of Food Production regarding the cultivation of foodstuffs and submits that a great injustice is being done to many estates which are unable, through no fault of their own, but owing to lack of suitable land to cultivate foodstuffs. He proposes that the Director of Food Production be written to with a request that estates which are unable to obtain land to cultivate foodstuffs should be issued their normal rice rations on the production of a certificate to that effect issued from the District Officer in that district.

Mr. KENNEDY points out that paragraph 5 of the Director of Food Production's letter dated 16th March, states that estates which have not planted foodstuffs will be allowed to purchase rice if it is available.

Mr. CARTER emphasizes that he wishes to have a guarantee that rice will be obtainable for estates which cannot obtain land upon which to grow foodstuffs.

Mr. FENNINGWORTH seconds Mr. Carter's proposal which is agreed to.

The Secretary is instructed accordingly.

12.—COPRA DEALERS.

The SECRETARY submits the following correspondence :

"KUALA LUMPUR,
"FEDERATED MALAY STATES,
"*2nd February, 1920.*

"No. 6979/19.

"SIR,

"In reply to your letter dated 19th November, on the subject of the introduction of legislation to enforce the licensing of copra dealers in the Federated Malay States, I am directed to inform you that, after full consideration of the proposal, the Government can see no adequate reason for the introduction of such legislation.

"I have, etc.,
"(Sd.) T. S. ADAMS,
"*for Acting Under Secretary, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"KUALA LUMPUR,
"*18th March, 1920.*

"LICENSING OF COPRA DEALERS.

"SIR,

"With further reference to your letter No. 6979/19, dated the 2nd ultimo, I am instructed to forward for the information of the Government copy of the minutes of the ordinary meeting of this Association which was held on 29th January last, and to direct your attention to pages 28 to 33 thereof which give facts and figures relating to copra thefts.

"2. I am to say that this Association invites the Government to reconsider the subject in the light of the information now available, and to introduce legislation to enforce the licensing of copra dealers.

"I have, etc.,
"(Sd.) C. WARD-JACKSON,
"*Secretary.*

"THE UNDER SECRETARY TO GOVERNMENT, F.M.S.
"KUALA LUMPUR."

"KUALA LUMPUR,
"FEDERATED MALAY STATES,
"*1st April, 1920.*

"No. G. 1495/20.

"SIR,

"I am directed to acknowledge the receipt of your letter dated 18th March, 1920, on the subject of the licensing of copra dealers.

"2. The information forwarded by you will have the consideration of Government.

"I have, etc.,
"(Sd.) T. P. COE,
"*for Acting Under Secretary, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"KUALA LUMPUR,
"*18th March, 1920.*

"LICENSING OF COPRA DEALERS.

"SIR,

"With further reference to your letter No. 10174/19, dated 4th December, 1919, I am instructed to forward for the information of the Government copy of the minutes of the ordinary meeting of this Association which was held on 29th January last, and to direct your attention to pages 28 to 33 thereof which give facts and figures relating to copra thefts.

"2. I am to say that this Association invites the Government to reconsider the subject in the light of the information now available, and to introduce legislation to enforce the licensing of copra dealers.

"I have, etc.,
"(Sd.) C. WARD-JACKSON,
"*Secretary.*

"THE HON. THE COLONIAL SECRETARY, S.S.,
"SINGAPORE."

"COLONIAL SECRETARY'S OFFICE,
"SINGAPORE,
"*6th April, 1920.*

"No. 10174/19.

"SIR,

"I am directed to acknowledge receipt of your letter of 18th March, 1920, with reference to the proposed licensing of copra dealers, and forwarding a copy (of the minutes of ?) the ordinary meeting of your Association which was held on 29th January last, and in reply to state that after further consideration the Government is still unable to alter the decision conveyed to you in my letter dated 4th December last.

"I have, etc.,
"(Sd.) G. A. HALL,
"*for Colonial Secretary, Straits Settlements.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"KUALA LUMPUR,
"*23rd April, 1920.*

"No. G. 1495/20.

"SIR,

"In continuation of my letter No. G. 1495/20 of the 1st April, 1920, on the subject of licensing of copra dealers, I am directed to inform you that the Federated Malay States Government sees no reason for altering the decision conveyed to you in my letter No. C.S.O. 6979/19 of the 2nd February, 1920.

"I have, etc.,
"(Sd.) W. H. MACKRAY,
"*Acting Under Secretary, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Mr. Gray says the suggestion to license copra dealers originated from the Lower Perak Planters' Association which represents one of the largest copra producing districts in the country. Estates were suffering to such an extent from copra thefts that it was felt that some action should be taken whereby it would be possible for the Government to exercise greater control. He thinks it particularly worthy of note that a petition favouring the idea of licensing copra dealers which was addressed to the District Officer, Lower Perak, some time ago was signed not only by almost all European coconut planters in that district but also by a large number of native holders. Taking these facts into consideration, the refusal of the Government to introduce the legislation asked for is very disappointing and it is hoped that the decision will be reconsidered again.

Mr. Harvey refers to the following report of a question he asked on this subject at the last meeting of the Federal Council, and the Chief Secretary's reply thereto :

> "During the latter part of last year, considerable thefts of copra took place, and at the Planters' Association of Malaya meeting at Penang it was decided to ask Government to license copra dealers. The Colonial Government replied that they could not see any sufficient reason for the licensing of copra dealers, and he understood the Federal Government supported the same view. Coconuts were sold very cheaply during a large part of the war, but towards the end of the war copra was fetching $25 to $30 per pikul. It was very hard on the planting industry that thefts of copra were causing serious loss when good prices were obtained. Planters had some justification in asking that licences for dealing in copra be issued the same as for dealing in rubber.
>
> "The Chief Secretary replied that the Residents had all expressed their opinion against these. He did not think it was fully understood how the granting of these would affect a large number of coconut planters. He felt sure they would not appreciate the extension of licences to copra. He had looked through the statistics of thefts and they did not show that licensing would be justified."

Mr. Gray says it would appear that the Chief Secretary is in possession of some information which would prove that the licensing of copra dealers would be against the interests of copra producing estates and should this be the case it should surely be wise to extend this information to the planters themselves, who would then in their own interest be the most eager to allow the matter to drop.

He says the Lower Perak planters are particularly interested in this matter and feel sure that the Planters' Association of Malaya will not allow it to drop but rather strive all the more to persuade Government to uphold the scheme and to legislate accordingly.

He proposes that the Secretary be asked to write to Government emphasizing the fact that the original petition favouring the licensing of copra dealers was signed by a big number of native holders, and at the same time ask for information which would explain the Chief Secretary's statement, that he did not think it was fully understood how the granting of copra licences would affect a large number of coconut planters.

Mr. DUNCAN points out that coconuts which had previously dropped in price had now become valuable and that copra was an article well worth stealing. He submits it is only right to ask that the law which protects other industries like rubber should be extended to copra also.

Mr. HARVEY explains that the Chief Secretary meant by coconut planters, native holders who grew coconuts. He merely wishes to explain what the Chief Secretary said but he does not wish it to be thought that he is in agreement with the Chief Secretary in the decision of the Government not to introduce the legislation asked for.

Mr. GRAY believes that his Association asked for legislation making it incumbent upon copra dealers, and not coconut planters, to be licensed.

Mr. PRITCHARD points out that copra is more easily stolen than either rubber or tin.

Mr. HINDLEY seconds Mr. Gray's proposal which is agreed to, and the Secretary is instructed accordingly.

12.—FUEL.

The SECRETARY submits the following correspondence:

"OFFICE OF THE SENIOR WARDEN OF MINES,

"FEDERATED MALAY STATES,

"KUALA LUMPUR,

"*9th March, 1920.*

"No. (4) in 49/20.

"SIR,

"I have the honour to inform you that an enquiry is being held into the existing shortage of fuel in the Federated Malay States, also as regards the general fuel situation at present and in the future.

"2. This enquiry is being conducted by the General Manager, Railways, the Conservator of Forests and the Senior Warden of Mines.

"3. It has been decided to invite your Association to nominate one of your members, who would be able to give information to the officers making the enquiry in question, with regard to the requirements of the industry that you represent.

"4. If your Association can see their way to nominate such member, would you kindly ask him to communicate at an early date with the undersigned, in order that a date of meeting can be arranged.

"I have, etc.,
"(Sd.) W. EYRE KENNY,
"*Senior Warden of Mines, F.M.S.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"OFFICE OF CONSERVATOR OF FORESTS,
"F.M.S. and S.S.,
"KUALA LUMPUR,
"*23rd March, 1920.*

"No. 5 in 135/20.

"SIR,

"In view of the difficulty of securing an adequate supply of fuel for mines and other purposes, and at the same time of the need for removing timber from planted estates, it would seem that every encouragement should be given to timber cutters to turn their energies to the removal of waste timber from the rubber plantations.

"I am informed that in some cases managers are willing to pay to have wood taken away, and that in some cases firewood is procurable from forest reserves more cheaply than from plantations.

"2. I should esteem it a favour if you could inform me of the names and situation of any estates which have wood to dispose of, with some indication as to the quantity and kind of material available, the facilities for its removal, and the possibility of finding a local market.

"I have, etc.,
"(Sd.) C. CUBITT,
"*Conservator of Forests, F.M.S. & S.S.,*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Mr. HARVEY says he is a member of the committee of enquiry into the shortage of fuel and suggests that members would communicate with the Conservator of Forests giving him any information in their power.

Mr. SHELTON-AGAR believes that a good proportion of timber upon estates is of little value as fuel.

14.——DISTRICT NURSES.

The SECRETARY submits the following figures regarding the European population on estates, and is instructed to request the three District Planters' Associations who have not yet sent in their returns to do so:

EUROPEAN POPULATION ON ESTATES.

	Men.	Women.	Children.	Total.
Kajang	73	21	14	108
Kapar	50	22	12	84
Klang	51	17	15	83
Kuala Selangor	80	34	19	133
Kuala Lumpur...	74	35	16	125
Batang Padang	60	19	7	86
Lower Perak ...	69	16	8	93
Taiping	84	30	18	132
Central Perak ...	95	17 ?	26	138
Batu Tiga ...	50	19	11	80
Johore	118	?	?	118
Ulu Selangor ...	43	12	8	63
Bahau, Kuala Pilah	35	7	6	48
Krian, Kedah and Province Wellesley ...	76	56	33	165
Negri Sembilan	261	62	37	360
Kuala Langat ...				
Central Pahang				
Kelantan ...				
Total ...	1,219	367	200	1,816

15.—RAILWAY MATTERS.

The SECRETARY submits the following letters:

"FEDERATED MALAY STATES RAILWAYS,
"GENERAL MANAGER'S OFFICE,
"KUALA LUMPUR,
"10th February, 1920.

"No. G.M.R. 3820/19.

"SIR,

"I have the honour to refer to your letter of 4th ultimo on the subject of the provision of railway police constables at certain stations for the protection of rubber and to state that instructions have been given for an additional constable to be stationed at Sungei Choh.

"2. There are no facilities for storing rubber at Padang Jawa and Kepong but instructions have been given for the construction of a goods lock-up at the latter station.

"3. I have under consideration a proposal to construct a road to Connaught Bridge Junction Station and to close Padang Jawa Station which is only a mile and a quarter distant.

"4. I propose to address you further in regard to this matter as soon as the necessary plans and estimates have been prepared.

"I have, etc.,
"(Sd.) P. A. ANTHONY,
"*General Manager.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

"KUALA LUMPUR,
"*15th April, 1920.*

"No. G.M.R. 1076/20.

"SIR,

"I have the honour to refer to my letter of the 10th February last, on the subject of the provision of railway constables at certain stations for the protection of rubber consignments, and in which I informed you that we had under consideration a proposal to construct a road to Connaught Bridge Junction Station in order to deal with goods traffic there and to close Padang Jawa Station which is only $1\frac{1}{4}$ miles distant.

"2. I now enclose for your information a copy of Plan No. 12,294 which indicates in red the position of the proposed road and shall be glad to know whether your Association would have any objection to raise to the proposal being carried out.

"I have, etc.,
"(Sd.) P. A. ANTHONY,
"*General Manager, F. M. S. Railways.*

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

The SECRETARY tables the plan referred to and says he is forwarding a copy of it for the information of members of the Klang District Planters' Association who are most interested in the proposed new road.

16.—NEXT MEETING.

On the proposal of Mr. Bruce, seconded by Mr. Hickson, it is resolved to hold the next meeting of the Association at Penang on 30th June next.

17.—GENERAL.

The SECRETARY tables copy of the address presented by the Planters' Association of Malaya to His Excellency the High Commissioner in March last:

"We the representatives of the Planters' Association of Malaya, an Association comprised of 520 estates situated in Perak, Province Wellesley, Selangor, Negri Sembilan, Pahang, Johore, Kedah, Kelantan and Trengganu, the total area being 622,852 acres in cultivation, desire to express to Your Excellency our loyalty to His Majesty the King and to extend to your Excellency a very hearty welcome to this important and picturesque Eastern outpost of the British Empire.

"As Your Excellency is no doubt fully aware by now, Malaya produces more than one-half of the whole world's rubber supply and there is no need to emphasize in these post-war days the enormous value and importance of this industry to the Empire.

"The desires and necessities of the planting world have already been fully expounded to your Excellency, and we now ask respectfully for your early and favourable consideration of only two matters:

"1. The encouragement of Chinese immigration and the institution of a system of registration of all aliens living and working in British Malaya, especially as regards Chinese labour on estates.

"2. The right of this Association to elect two representatives to the Federal Council.

"The rubber and coconut industries are at present in a flourishing condition, and in connection with this matter of prosperity we would like to be permitted to point out to your Excellency that, unlike certain other financial industries in this part of the world, a very large proportion of the money made out of rubber is put back again into the land by means of extensions and improvements. We believe that the history of the plantation rubber industry in Malaya shows that great credit is due to the Government by reason of the leasing of land at low rentals, the control and encouragement of Indian Immigration and the institution of the Planters' Loans Board, and we also believe that the planters themselves deserve credit for the part they have played in the development of the F.M.S. The record of our Association in the great war in respect to the contribution of men and money is one of which we are justly proud.

"We desire to thank the Government for the great assistance given to the estates in the matter of the distribution and control of rice and other foodstuffs at the present time.

"We feel sure that when the Planters' Association of Malaya has cause to approach your Excellency with well-considered requests for assistance or concessions, these will receive full and fair consideration at your hands. And we think that we may rely upon the planters to support the Government when reasonably required to do so.

"We beg to wish Your Excellency and Lady Guillemard happy years in Malaya."

The SECRETARY states that the Resident of Selangor has consented to receive a deputation of members of this Association with reference to the subject of night telephone service in outlying districts and says that representatives from Kajang, Ulu Selangor and Kuala Selangor District Planters' Associations have been nominated.

Mr. HARVEY wishes to propose that Mr A. B. Milne be elected an Honorary Member of the Association. He says Mr. Milne has been connected with the Planters' Association of Malaya for many years and had a longer connection with it than he has. He understands that Mr. Milne is severing his connection with District Planters' Associations and is about to reside outside the Federated Malay States.

Mr. DUNCAN has much pleasure in seconding Mr. Harvey's proposal which is carried unanimously.

The SECRETARY tables copy of Volume I of the Malaria Bureau Reports by Dr. H. P. Hacker and says copies may be had on application being made to him.

With a vote of thanks to the Chair, the meeting terminates at 4 p.m. after having adjourned for tiffin from 1.15 to 2.30 p.m.

(Sd.) C. WARD-JACKSON,
Secretary.

Table I.

Agricultural Acreages, Federated Malay States, 1918 and 1919, excluding Padi and Horticulture, from Estates over 100 acres in extent.

	Selangor.		Perak.		Negri Sembilan.		Pahang.		Total.	
	1918	1919	1918	1919	1918	1919	1918	1919	1918	1919
Coconuts	27,562	28,311	38,084	38,393	2,260	1,528	2,962	2,780	70,868	71,012
Rubber	271,593	287,008	219,481	234,368	165,199	193,148	15,833	22,218	672,106	736,742
Coffee	1,215	2,237	62	642	9	9	15	35	1,301	2,923
Other cultivations	1,288	2,780	2,303	2,507	645	3,424	329	504	4,565	9,215
Total ...	301,658	320,336	259,930	275,910	168,113	198,109	19,139	25,537	748,840	819,892

Table II.

Agricultural Acreages, Malaya, 1919, from Estates over 100 acres in extent.

—	Federated Malay States.	Straits Settlements.	Johore.	Kelantan, Kedah and Trengganu.	Grand Total.
Rubber alone	715,699	172,191	171,959	129,779	1,189,628
„ and Coffee	1,299	...	...	2,666	3,965
„ and Coconuts	1,449	284	...	...	1,733
„ with other crops	18,295	6,049	2,861	14,275	41,480
Total ...	736,742	178,524	174,820	146,720	1,236,806
Coconuts alone	66,216	23,569	2,223	13,136	105,144
„ and Coffee	702	160	...	...	862
„ with other crops exclusive of Coffee ...	4,094	281	...	60	4,435
Total ...	71,012	24,010	2,223	13,196	110,441
Coffee alone	922	...	...	...	922
„ with other crops	2,001	160	...	...	2,161
Total ...	2,923	160	...	...	3,083

TABLE III.

Rubber Statistics, Federated Malay States, up to 31st December, 1918 and 1919, from Estates over 100 acres in extent.

—	Selangor.		Perak.		Negri Sembilan.		Pahang.		Total.	
	1918.	1919.	1918.	1919.	1918.	1919.	1918.	1919.	1918.	1919.
No. of Estates	382	415	417	413	270	330	57	63	1,126	1,221
Acreage in possession ...	408,639	426,620	375,601	382,018	256,068	291,126	53,909	67,279	1,094,217	1,167,043
Acreage planted up to 31st December, 1918 and 1919 ...	271,593	287,008	219,481	234,368	165,199	193,148	15,833	22,218	672,106	736,742
Rubber alone	268,179	280,634	215,595	226,672	160,569	187,243	15,677	21,150	660,020	715,699
Rubber interplanted with catch crops	3,414	6,374	3,886	7,696	4,630	5,905	156	1,068	12,086	21,043
Acreage producing	189,065	205,750	161,010	168,366	89,164	107,786	7,936	8,470	447,175	490,372
Planted during 1918 and 1919	17,502	15,415	8,661	14,887	23,313	27,949	1,008	6,385	50,484	64,636

TABLE IV.

Rubber Statistics, Malaya, up to 31st December, 1918 and 1919, from Estates over 100 acres in extent.

	Federated Malay States.		Johore.		Kelantan, Kedah and Trengganu.		Straits Settlements.		Total.	
	1918.	1919.	1918.	1919.	1918.	1919.	1918.	1919.	1918.	1919.
No. of Estates	1,126	1,221	148	149	192	257	248	269	1,714	1,896
Acreage in possession	1,094,217	1,167,043	363,688	364,270	253,442	286,869	266,743	273,353	1,978,090	2,091,535
Acreage planted up to 31st December, 1918 and 1919 ...	672,106	736,742	166,116	174,820	118,232	146,720	167,789	178,524	1,124,243	1,236,806
Rubber alone	660,020	715,699	164,280	171,959	109,237	129,779	163,514	172,191	1,097,051	1,189,628
Rubber interplanted with catch crops	12,086	21,043	1,836	2,861	8,995	16,941	4,275	6,333	27,192	47,178
Acreage producing	447,175	490,372	89,945	96,324	46,776	50,774	107,539	114,516	691,435	751,986
Planted during 1918 and 1919 ...	50,484	64,636	3,741	8,704	9,598	28,488	14,600	6,610	78,423	108,438

TABLE V.

Comparative Table of Rubber Crops, Malaya, 1910 to 1919.

State.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.
	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.	Tons Cwt.
Selangor	3,148 13	5,106 14	7,482 6	10,110 15	12,601 6	16,061 11	19,996 11	24,573 3	26,464 11	29,657 6
Perak	1,322 8	2,697 4	4,116 18	6,623 17	8,959 7	12,112 1	17,336 18	19,453 2	21,331 18	25,231 11
Negri Sembilan ...	1,160 12	1,918 12	2,518 16	3,339 16	4,203 18	8,138 1	8,596 14	12,223 3	13,542 4	17,504 2
Pahang	1 2	13 18	74 14	155 9	337 19	548 13	682 8	1,010 13	1,179 3	1,292 6
Johore	296 12	404 2	968 6	1,645 7	2,861 7	4,711 2	6,840 7	8,193 7	11,267 12	12,426 18
Kelantan, Kedah and Trengganu ...	18 11	23 0	79 6	246 18	1,383 18	1,955 0	3,704 19	4,729 2	5,568 6	6,719 16
Malacca	267 16	382 11	1,742 6	3,549 2	3,979 16	5,181 1	6,606 12	7,376 16	7,721 19	8,016 0
Province Wellesley *	198 19	571 15	1,973 16	2,498 12	3,076 8	3,177 11	3,912 11	4,760 1	5,203 15	5,910 0
Total ...	6,414 13	11,117 16	18,956 8	28,169 16	37,403 19	51,885 0	67,677 0	82,319 7	92,279 8	106,757 19

* Including Singapore, Penang and Dindings.

Table VI.

** Estate Labour, Federated Malay States, 1919, from Estates over 100 acres in extent.*

—	Selangor.	Perak.	Negri Sembilan.	Pahang.	Total.
Tamil men	54,761	48,529	12,122	1,426	116,838
„ women	22,107	16,572	3,448	203	42,330
„ children	8,878	5,213	927	88	15,106
Javanese men	1,933	1,784	710	1,195	5,622
„ women	301	986	424	602	2,313
Malays	844	4,040	5,402	447	10,733
Chinese	10,237	10,908	17,655	1,071	39,871
Others	274	433	537	138	1,382
Total ...	99,335	88,465	41,225	5,170	234,195

* Coolies working under contractors are not included.

TABLE VII.

** Estate Labour, Malaya, 1919, from Estates over 100 acres in extent.*

	Federated Malay States.	Johore.	Kelantan, Kedah and Trengganu.	Straits Settlements.	Total.
Tamil men	116,838	9,819	9,710	19,069	155,436
„ women	42,330	1,989	3,674	6,040	54,033
„ children	15,106	642	1,108	1,605	18,461
Javanese men	5,622	4,740	531	1,864	12,757
„ women	2,313	1,175	129	587	4,204
Malays	10,733	3,124	8,008	4,268	26,133
Chinese	39,871	12,438	10,480	8,684	71,473
Others	1,382	467	472	505	2,826
Total ...	234,195	34,394	34,112	42,622	345,323

* Coolies working under contractors are not included.

Abstract of Meteorological Readings in the various districts of Malaya for the month of January, 1920.

District.	Mean Barometrical Pressure at 32° Fah.	Maximum in Sun.	Temperature.				Hygrometer.				Prevailing Direction of Winds.	Total Rainfall.	Greatest Rainfall during 24 hours.
			Mean Dry Bulb.	Maximum.	Minimum.	Range.	Mean Wet Bulb.	Vapour Tension.	Dew Point.	Humidity.			
Kelantan, Kota Bahru	...	144.2	77.1	83.35	70.93	12.41	73.2	.746	70.5	80.	...	5.75	2.56
Pahang, Kuala Lipis	...	...	77.7	84.22	...	...	74.21	...	...	...	...	5.33	1.37
Johore, Johore Bahru	...	...	...	84.19	71.83	...	...	...	...	...	...	17.00	3.89
Singapore, Kandang Kerbau ...	31.010	156.0	80.0	86.4	72.9	13.3	75.7	.829	...	81.2	N.E.	15.27	4.60
Malacca, Durian Daun	29.890	136.0	81.0	87.0	71.0	16.0	75.0	.879	...	84.	N.E.	2.99	.90
Negri Sembilan, Seremban ...	...	148.6	79.6	85.3	71.6	13.7	76.2	.797	74.7	78.8	N.	1.24	.94
,, Kuala Pilah ...	...	151.6	82.0	90.5	...	...	79.6	.976	78.0	85.0	...	9.11	2.32
,, Port Dickson...	...	110.9	80.3	86.4	73.5	12.9	76.2	.828	73.5	79.9	...	4.80	1.11
Selangor, Kuala Lumpur ...	29.799	152.0	80.2	89.0	72.1	16.9	74.0	.826	73.3	80.6	Calm	4.85	1.80
,, Klang	...	...	78.6	83.0	73.5	9.5	75.4	...	...	...	...	7.91	1.20
,, Kuala Selangor ...	...	...	...	87.0	73.9	13.1	...	...	...	...	...	10.54	2.83
,, Rawang	...	...	...	90.8	71.0	19.8	...	...	...	...	...	2.90	.74
Perak, Telok Anson	...	...	80.12	91.0	71.0	20.0	75.85	.834	...	82.0	...	12.12	3.34
,, Ipoh	...	...	80.88	93.0	72.0	21.0	75.57	.814	73.53	78.0	...	8.34	3.16
,, Taiping	...	108.0	81.03	91.0	69.0	22.0	77.73	.907	...	87.0	...	4.80	1.41
,, The Cottage	...	...	...	...	...	...	...	...	...	...	...	15.88	3.74
,, Parit Buntar	...	...	81.42	91.0	69.0	28.0	76.87	.856	...	80.0	...	1.45	.74
Penang, George Town	29.874	151.7	82.7	88.9	71.9	17.0	76.5	.823	69.1	75.2	N.W.	...	...
Kedah, Alor Star	...	...	...	...	...	...	...	...	...	...	...	2.32	1.18
Perlis, Kangar	...	...	...	86.22	70.74	15.48	...	...	...	...	...	.40	.31

Abstract of Meteorological Readings in the various districts of Malaya for the month of February, 1920.

District.	Mean Barometrical Pressure at 32° Fah.	Maximum in Sun.	Temperature.				Hygrometer.				Prevailing Direction of Winds.	Total Rainfall.	Greatest Rainfall during 24 hours.
			Mean Dry Bulb.	Maximum.	Minimum.	Range.	Mean Wet Bulb.	Vapour Tension.	Dew Point.	Humidity.			
Kelantan, Kota Bahru	...	144.71	80.1	89.17	71.75	17.41	75.2	.782	71.9	76.	...	4.28	1.10
Pahang, Kuala Lipis	...	...	80.95	89.82	...	....	75.8	...	...	...	...	8.25	3.22
Johore, Johore Bahru	...	...	...	84.19	71.83	.....	....	...	...	...	...	17.00	3.89
Singapore, Kandang Kerbau ...	...	160.0	82.1	88.1	73.5	14.6	77.2	.862	...	79.	N.E.	6.88	1.18
Malacca, Durian Daun ...	...	139.0	83.0	87.0	72.0	15.0	77.0	.882	...	78.	N.E.	4.21	1.73
Negri Sembilan, Seremban ...	...	145.2	80.0	88.9	71.8	17.1	75.4	.807	73.3	79.	N.W.	5.13	1.25
,, Kuala Pilah ...	...	156.2	82.2	96.6	...	....	79.3	.955	79.9	85.	...	8.35	2.12
,, Port Dickson ...	...	122.0	81.5	89.7	74.2	15.5	77.2	.845	74.1	78.	...	2.87	.88
Selangor, Kuala Lumpur ...	29.812	152.1	82.4	89.7	72.3	17.4	77.4	.849	74.1	76.	Calm	3.81	.79
,, Klang	...	...	80.3	85.0	74.0	11.0	76.5	...	...	...	...	11.14	2.36
,, Kuala Selangor ...	...	...	...	88.5	73.5	15.0	...	...	...	...	...	4.69	1.14
,, Rawang	...	...	...	91.6	71.5	20.1	...	...	...	...	...	6.21	1.03
Perak, Telok Anson	...	...	81.60	92.0	70.0	22.0	77.35	.882	...	83.	...	8.70	2.44
,, Ipoh	...	...	82.45	95.0	70.0	25.0	76.24	.822	74.25	75.	...	8.85	2.99
,, Taiping	...	110.0	81.33	93.0	70.0	23.0	77.52	.894	...	85.	...	15.78	5.78
,, The Cottage	...	...	...	...	...	...	...	...	...	...	...	16.33	4.94
,, Parit Buntar	...	...	82.69	92.0	71.0	21.0	77.81	.889	...	81.	...	5.27	1.77
Penang, Georgetown	...	151.1	82.0	89.8	71.5	18.3	76.9	.853	63.5	71.5	N.W.	7.83	2.16
Kedah, Alor Star													
Perlis, Kangar	...	...	...	90.34	71.27	19.07	...	...	...	...	...	5.07	3.68

Abstract of Meteorological Readings in the various districts of Malaya for the month of March, 1920.

District.	Mean Barometrical Pressure at 32° Fah.	Maximum in Sun.	Temperature.				Hygrometer.				Prevailing Direction of Winds.	Total Rainfall.	Greatest Rainfall during 24 hours.
			Mean Dry Bulb.	Maximum.	Minimum.	Range.	Mean Wet Bulb.	Vapour Tension.	Dew Point.	Humidity.			
Kelantan, Kota Bahru	...	145.0	80.7	88.19	71.41	16.78	76.2	.818	73.2	78.	...	3.84	.67
Pahang, Kuala Lipis	...	...	81.52	89.80	75.70	14.10	76.2	...	...	...	...	4.17	1.00
Johore, Johore Bahru	...	...	...	88.74	72.91	...	...	...	...	...	...	6.55	1.69
Singapore, Kandang Kerbau ...	1008.2	157.0	83.16	89.4	74.3	15.1	77.9	.880	...	77.6	N.E.	6.12	1.96
Malacca, Durian Daun	1010.4	137.0	81.0	89.0	73.0	16.0	77.0	.900	...	78.0	N.E.	12.14	3.18
Negri Sembilan, Seremban ...	...	147.0	80.7	89.0	72.0	17.0	75.2	.786	71.5	74.2	N.W.	11.65	2.43
„ Kuala Pilah ...	...	155.7	81.5	91.1	...	...	78.7	.922	78.2	86.8	...	4.92	1.29
„ Port Dickson ...	...	117.0	82.5	90.5	74.1	18.5	75.3	1.064	71.2	73.7	...	2.17	.78
Selangor, Kuala Lumpur ...	29.811	153.0	82.9	90.5	72.0	18.5	77.4	.844	73.9	75.	Calm	7.05	1.35
„ Klang	...	...	78.6	85.7	75.0	10.7	76.9	...	...	...	...	6.54	1.39
„ Kuala Selangor ...	...	...	...	89.2	73.6	15.6	...	...	...	...	...	4.06	.72
„ Rawang	...	...	...	92.7	72.5	20.2	...	...	...	...	...	4.92	.90
Perak, Telok Anson	...	...	82.38	93.0	69.0	24.0	78.01	.903	...	83.	...	10.11	2.20
„ Ipoh	...	...	83.03	95.0	70.0	25.0	76.80	.840	74.28	75.	...	5.27	1.49
„ Taiping	...	108.0	81.14	92.0	70.0	22.0	77.74	.906	...	87.	...	23.42	4.32
„ The Cottage	...	...	...	...	...	...	...	...	...	...	...	6.77	2.24
„ Parit Buntar	...	...	83.40	93.0	72.0	21.0	78.47	.907	...	81.	...	7.16	1.22
Penang, George Town	1007.7	149.9	85.6	91.7	72.8	18.9	75.3	.864	62.3	76.8	N.W.	4.21	1.45
Kedah, Alor Star	...	...	...	...	...	...	...	...	...	...	...	1.94	.51
Perlis, Kangar	...	...	...	92.96	72.22	20.74	...	...	...	...	...	.90	.38